

SPECIAL REPORT S-7



# WOMEN CONTENT IN THE ARMY

## REFORGER 77

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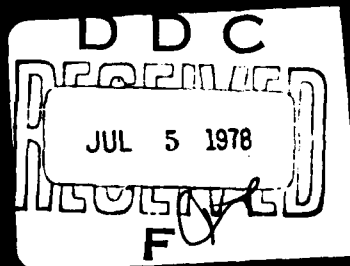
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(REF-WAC 77)

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Since some support units on both sides of the REFORGER 77 exercise contained close to 10% women, the Army decided to follow closely the performance of women soldiers and male counterparts who were matched on demographic and personal characteristics. Other comparisons between the matched men and women soldiers related to deployability and to time lost from duty.

REF WAC observer teams collected data on the performance of women in the following divisional combat support and combat service support units: military police, signal, medical, maintenance, and supply and transportation.

Small teams or work groups with a sizeable number of women were compared with similar all-male units performing the same tasks in both the first part and the latter part of REFORGER 77. The Army Research Institute addressed the question of whether performance during an extended field exercise was affected by fatigue and stress more adversely in units containing women than in all-male units.

Results support a conclusion that 10% women has negligible impact on unit performance in a 10 day field exercise for the types of companies tested. Of the 90 Military Occupational Specialties in the 27 participating units 18 were designated as being physically too demanding for women by 50% or more officers or NCO supervisors. A number of leadership and management problems involving women were observed.

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**SPECIAL REPORT S-7**

**WOMEN CONTENT IN THE ARMY - REFORGER 77 (REF-WAC 77)**

**Cecil D. Johnson, Bertha H. Cory, Roberta W. Day,  
Laurel W. Oliver, et al.**

**CAREER DEVELOPMENT SOLDIER PRODUCTIVITY TECHNICAL AREA**

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**Office, Deputy Chief of Staff for Personnel  
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**30 May 1978**

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## PREFACE

The behavioral science research effort reported here was undertaken to contribute information for use along with that from several research investigations and other sources in determining Army long-range policy bearing on the number and utilization of women in the Army. This research is in consonance with the Army five-year research plan for exploring the role of women in the Army.

The MAX WAC research showed that the number of women (up to 35%) had no significant effect on the operational capability of specific Category II and III company-size units as measured by 72-hour Army Training and Evaluation Programs (ARTEP). Extrapolation of results (assuming no impairment for an enlisted woman content of 35%) to units of the type included in MAX WAC showed that the Army could accept up to 6,000 more enlisted women than in the then-current assignment planning. The REF WAC results indicate no impairment of performance in Category II and III units having women in an extended field exercise. These results thus enhance the credibility of the no-impairment finding of MAX WAC.

Neither the MAX WAC nor REF WAC research efforts was intended to provide an empirical basis for objectively establishing an upper bound on the potential number of women in support units. Both efforts have had their primary focus on the validation of TRADOC unit limits for women.

Both the MAX WAC and REF WAC investigations have provided the Army with additional data (observations, questionnaire responses, and, for REF WAC, supervisory ratings) for insights into the evaluation of the role of women. Two major conclusions must be considered by policy-makers:

a. Contrary to opinions of many who extrapolated from their experience in combat and extended field exercises (that did not include observations of women), women did sustain themselves in the field and accomplish MOS-related duties at an acceptable level. The command channel, from NCO's through unit commanders, showed a high degree of creativity and flexibility in utilizing women in the field. Additional training and indoctrination are still needed for enlisted women, their male peers, and their supervisors.

b. A consensus exists among unit supervisors that several factors should be considered in assigning women to teams: the proportion of women in the MOS and teams, the strength requirements of tasks, and the need to function in the midst of combat brigades as members of special teams. Such considerations could place further constraints on the numbers of women assignable to units, over and above those limitations that are imposed by closing some MOS to women.

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# FIELD RESEARCH ON ROLE OF WOMEN IN THE ARMY

Both MAX WAC and REF WAC were funded as integral components of the behavioral science R&D project 2Q263731A776 titled "Role of Women in the Army" that was initiated in FY 76. This ARI project is managed by the Individual Training and Performance Research Laboratory (ITPRL) directed by Dr. E. Ralph Dusek, and is primarily executed in the Career Development and Soldier Productivity (CDSP) Technical Area of ITPRL. The two Test Directors, for MAX WAC and REF WAC, reported directly to the Commander, ARI, and had full responsibility for their military teams and for coordination with all participating field elements, as soon as they reported aboard. Technical responsibility for planning, analysis of results, and final reporting remained with Chief, CDSP, who also directed the efforts of the CDSP scientific staff who participated in either or both MAX WAC or REF WAC. The listing below contains only the CDSP scientists who spent almost full time on one or both efforts. Other CDSP scientists such as Mrs. P. T. Olson, Dr. S. F. McDowell, Dr. J. C. Woelfel and Dr. E. M. Schreiber also participated in aspects of instrument preparation, data collection, or data analyses for this research. Several others assisted in data collection. Dr. J. J. Mellinger of the ARI Statistical & Computer Science Office participated in research design and planning of data analyses for both efforts. MAJ T. D. Cox and Dr. J. R. Raney contributed during the early planning phase of MAX WAC. Ms. F. C. Grafton, Ms. G. P. Rowan, and Mr. S. A. Sachs provided creative input to the analyses.

Maximum Women Army Content		Women in the Army REFORGER 77	
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WOMEN CONTENT IN THE ARMY - REFORGER 77 (REF WAC 77)

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## PART I

### EXECUTIVE SUMMARY

#### WOMEN CONTENT IN THE ARMY-REFORGER 77 (REF WAC 77)

**BACKGROUND:** Since 1972, considerable attention has been directed toward determining the impact of expanding the role of women in the Army. In 1975, the U.S. Army Training and Doctrine Command (TRADOC) reviewed unit structures to identify male or female positions which could be filled interchangeably and to determine the maximum number of women who can be assigned to units without adversely affecting the unit's ability to perform its mission. In 1976, the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) conducted a research effort to determine the effect on mission accomplishment of varying the percentage of women assigned to a unit. This effort, known as MAX WAC, evaluated 40 companies of five combat support/combat service support types, using ARTEP scenarios (72 hours in duration) for evaluation of group performance. The percentage of controlled-fill twice-tested units was either 0% or 15% for the initial ARTEP and either 15% or 35% for a second ARTEP six months later. The results of this research did not reveal significant differences in unit performance over the limited time period. The overall interpretation of both performance data and questionnaire responses was that female soldiers, up to the percent tested in the kind of units participating, did not impair unit performance during intensive 72-hour field exercises. Unanswered by MAX WAC results was the question of the impact of women on unit mission accomplishment in a field test of extended duration. Accordingly in 1977, ARI was tasked to design and conduct research to evaluate the role of women participating in REFORGER 77. The results are presented in this report.

**PURPOSE:** The purpose of this research was to assess the impact of female soldiers assigned to representative types of Category II and III units on the capability of a unit to perform its mission under extended field conditions. The objective was to provide empirical data to test the hypotheses that there will be no difference between all-male and mixed gender group performance and no difference between enlisted female and matched enlisted male individual performance that would impair unit performance.

**APPROACH:** Performance was evaluated in maintenance, medical, military police, signal, and supply and transportation units during their participation in the field training exercise (FTX) CARBON EDGE. The REF WAC research design revolved around the requirement for comparability of male and female performance data. These data were collected on a daily basis from unit supervisors by Test Directorate NCO data collectors acquainted with the soldiers being tracked; through observations of group and individual performance by independent officer evaluators from the Test Directorate; and by ARI administration of questionnaires to unit personnel before and after the FTX.

The Test Directorate consisted of 50 personnel organized into a headquarters staff and five teams, one for each type of unit. Each team consisted of a branch-qualified team chief (LTC), combat arms officer, female officer, and branch-qualified personnel. The team officers collected performance ratings on both ARTEP-type group events and Soldier's Manual-type individual events and made unstructured observations on other events relevant to REF WAC objectives. Since the research effort was directed not to interfere with the FTX, officer evaluators were required to select target of opportunity groups for evaluation. For group events, officers were to focus on events more likely to recur for both a female or mixed group and for one or more matching all-male group(s). For individual event ratings, officer evaluators were to select, for each enlisted woman on whom a rating was obtained, an enlisted man performing the same task. All performance ratings were made on a seven-point scale.

#### MAJOR FINDINGS:

The presence of female soldiers on REFORGER 77 did not impair the performance of combat support and combat service support units observed when unit mission was defined in terms of the REFORGER 77 scenario. Group performance ratings during the first and last periods of the exercise showed no difference between all-male and mixed groups. Although mixed groups showed a superiority over all-male groups during the middle period, the results were statistically significant for only one type of unit. This difference did not hold up when data from all units were considered. Similarly, there were no consistent patterns of individual male versus female performance differences over the entire exercise, whether the tasks performed were considered as a whole, were divided into common and unique tasks, or occurred in high stress or low stress companies. When daily performance ratings by supervisors in high stress companies were considered separately, enlisted women initially gave a statistically significant poorer performance than enlisted men during the first three days of CARBON EDGE but gained equality in performance by the last three days of the exercise. Aggregated sets of individual and group performance data for men and women showed a clear upward trend over time from the first three days to the last four days of the exercise. Of a total of 20 computed differences over time, 15 showed an increase, four remained the same and one showed a decrement. Thus REF WAC results provide a basis for increased credibility of MAX WAC findings, i.e., no difference in unit performance based on a 72-hour field exercise.

#### SUPPLEMENTARY FINDINGS:

- About 15% of available enlisted men and 29% of the enlisted women were not deployable from CONUS for REFORGER. Percentages were about the same for Europe-based troops. Of those nondeployables, 2% of the enlisted men and 11% of the enlisted women were nondeployable for personal reasons; 15% of the enlisted men and 12% of the enlisted women were nondeployable for administrative reasons.

- The percentage of enlisted women deploying in each unit (with one exception) was just under 10%.

- Enlisted women were proficient in MOS tasks, both traditional and nontraditional, and demonstrated improvement during the exercise. Yet, there was considerable concern at the troop level as to the capability of female soldiers to perform many of the critical duties of their MOS in support units.

- Slightly over 23% (49 of 229) of the enlisted women participating in REFORGER had nontraditional MOS but were assigned to traditional duties during REFORGER.

- Enlisted women did not perform as well in tactical and sustenance tasks as their matched male counterparts. None of the women observed was the product of the new basic training.

- With respect to questionnaire responses concerning how well enlisted women performed on REFORGER 77, enlisted men were most critical, NCO's were the next most critical, and officers were least critical of female performance.

- The performance of enlisted women, possibly more so than enlisted men, was affected by leadership and management deficiencies or policies. Leadership and management problems were widespread and appeared to be the underlying causes of many problems involving women who were observed in REFORGER.

- Considerable and widespread bias against women was observed in units, most significantly among first-line supervisors. The reasons most frequently given were physical strength factors, the risk of exposing women to combat, and added problems in hygiene, sanitation, and billeting. As often occurs with targets of bias, women as a group were rated poorly (questionnaire responses), whereas they were rated as highly as their male counterparts when rated individually (performance observations).

- Eighteen out of 89 MOS considered (98 MOS were in the MTOE's of the participating units) were designated as being physically too demanding for women by 50% or more officers or NCO supervisors.

- A number of factors, in addition to strength requirements, shaped the opinions of unit personnel as to where enlisted women are most appropriately utilized.

- Pretest and posttest surveys indicated that the percentage of enlisted women in paygrades E3 and E4 was higher than that of enlisted men (81% versus 70%). Average ages were essentially the same for men and women (21 years). Enlisted women had a higher level of education (97% versus 85% with high school or above on the posttest). Fewer enlisted women than men were married (21% versus 32% on the posttest); the majority of both enlisted men and women never had been married.

- Unit officers and NCO supervisors, when asked to distribute hypothetical numbers of women and men over the MOS in a company, assigned the personnel to MOS on the basis of concentration, proportionality and suitability factors. When women or men constituted a small proportion of personnel to be assigned, the respondents tended to concentrate the women in the least physically demanding MOS and the men in the most physically demanding MOS. As the number of women increased, women were distributed more proportionally throughout the set of MOS except in those MOS considered more suitable for men because they required working in the midst of combat brigades. The goal of concentrating women in less physically demanding MOS appeared dominant when small numbers were to be distributed but less dominant as the mix (male and female) approached half and half.

- While unit officers and NCO supervisors expressed concern regarding the impact of women on unit performance, they placed much greater importance on other factors as having a comparatively greater effect on mission accomplishment.

CONCLUSIONS: The value of REF WAC results is limited by the characteristics of REFORGER 77: the number of enlisted women present, existing weather and terrain conditions, and the kind of tasks enlisted women were required to perform. The noninterference rule precluded the use of standard events for scoring purposes. Workloads could not be simulated where natural workloads limited observation opportunities, and the variety of tasks could not be artificially increased. However, REF WAC results provide the best available information on performance of enlisted women in an extended field situation and provide evidence that enlisted women can perform their MOS-related duties adequately in a REFORGER-type field exercise. The effort has served to clear the air and make it possible to address, openly and directly, these concerns of field commanders that units with large numbers of enlisted women may have a reduced combat readiness due to larger numbers of nondeployable personnel and reduced capability to perform tactical contingency missions. The REF WAC effort is one of many contributions to policy decisions regarding the use of women.



## PART II

### INTRODUCTION AND RESEARCH METHODOLOGY

#### 1. INTRODUCTION

Since 1972, considerable attention has been directed toward determining the impact of expanding the role of women in the Army. In 1975 at the request of the Deputy Chief of Staff for Personnel (DCSPER), the Training and Doctrine Command (TRADOC) reviewed unit structures to identify male, female, and interchangeable positions and to determine the maximum number of women who can be assigned without adversely affecting the capability of a unit to perform its mission. In 1975 DCSPER also tasked the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) to develop and conduct a field test in conjunction with the U.S. Army Forces Command (FORSCOM) to determine the effect of varying levels of women on mission accomplishment during a 72-hour field exercise. In this effort, identified in tasking letters as Maximum Women Army Content but more frequently referred to as MAX WAC, unit performance was evaluated on standardized scenarios for 40 companies of five types (maintenance, medical, military police, signal, and supply and transportation) for which the proportions of female enlisted personnel in 10 twice-tested controlled fill companies were increased from 0% to 15% and 15% increased to 35% for the second test. The results of this research did not reveal significant differences in performance among these units.<sup>1</sup>

Unanswered by MAX WAC results was the question of the impact of women on unit mission accomplishment in a field test of extended duration. Accordingly, in 1977 ARI was tasked by the Secretary of the Army to design and conduct research to evaluate the role of women participating in the field test in Germany, REFORGER 77. Results of this effort, known as "REF WAC 77," are presented in this report.

#### 2. PURPOSE AND SCOPE

In the tasking letter to ARI, signed by the DCSPER for the Secretary of the Army dated 27 June 1977 (DAAG-ZA, DAPE-MPE-DR 27 June 1977; subject: REFORGER 77-Impact on Women), Army management needs were delineated in terms of six objectives:

"(1) Establish an objective data base for developing and justifying Army policies and concepts for utilization of female personnel. These concepts will consider both traditional and nontraditional female roles as applied to a field-deployed unit.

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<sup>1</sup>Results of this field test are reported in "Women Content in Units Force Development Test (MAX WAC)," U.S. Army Research Institute for the Behavioral and Social Sciences, October 1977.

"(2) Collect data to determine training and assignment policies relating to female/male mix of units.

"(3) Collect data that will determine the impact on unit performance in units where a significant number of women in traditional and nontraditional skills are employed.

"(4) Collect objective data that will identify the nature and sources of any problem areas discovered.

"(5) Collect data by grade and MOS on how female and male officers (as individuals and as team members) view the performance and role of the female soldier during an extended field deployment (to include strength, stamina, and endurance).

"(6) Provide methodology and experience upon which to base a more complete controlled experiment in conjunction with future tests as required."

The annual Return of Forces to Germany (REFORGER) involving removal of CONUS-based troops from their home base for several weeks to participate in the 10-day field exercise named CARBON EDGE was designated as the research vehicle.<sup>2</sup> This attachment to REFORGER 77 and its follow-on relationship to MAX WAC resulted in the short title of REF WAC 77 for this research effort.

While the management objectives were desirable goals, achieving all of them within the required time frame was not possible due to limitations on resources, availability of subjects and field situations, and the constraint of noninterference in military mission. Accordingly, the research objectives developed by ARI and set forth in the Research Resource Requirements (R<sup>3</sup>), which closely corresponds to the Outline Test Plan required for Force Development tests, could not mirror completely the management objectives outlined above. The research objectives were:

"(a) To investigate the hypothesis that the performance in a field exercise of small organizational entities with a significant content of women will be degraded by the effects of an extended period in the field to a greater extent than will be true of comparable all male entities: the null hypothesis of no difference will be tested statistically.

"(b) To provide observational data on the performance of women soldiers and a comparable male cohort under field conditions--with particular note taken of critical incidents.

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<sup>2</sup>The following terms are used in this report and are clarified as follows: "REFORGER": the entire operation, duration varying for individuals according to their responsibilities; "CARBON EDGE" or "FTX": 10 days, 13-22 Sept 1977; "Field Deployment": 20-30 days, including CARBON EDGE and pre and post requirements.

"(c) To provide data (performance evaluations, observation of critical incidents, and daily records of company-based NCO observers) on the impact of women soldiers on the deployability and mobility of units.

"(d) To collect baseline data on unit performance for use in a more controlled experiment on the relationship of content of women to mission performance during REFORGER 78.

"(e) To collect data to augment the data base on women soldiers collected in the MAX WAC Force Development Test and on efforts funded under the Advanced Development project titled: 'Role of Women in the Army' (6.37.31.A776); intensive analyses of this data can provide information supportive of the formulation of policies on the utilization of women soldiers."

During May 1977, before most MAX WAC controlled-fill/experimental companies had received their Spring ARTEP, technical advisory services were informally requested of ARI regarding an initial DCSPER discussion paper considering the benefits and costs of collecting data on enlisted women during REFORGER 77. This discussion paper included a tentative plan for placing a noncommissioned officer data collector in each CONUS based support company scheduled to participate in REFORGER. This NCO would live and travel with that CONUS company until its return to home station. The NCO would have the objective of collecting daily data on the deployability, lost time, and performance capabilities of female soldiers. By late May the possibility that ARI would be tasked to conduct such an effort was under serious discussion. An ARI discussion paper was provided to the DA staff and USAREUR for comment and coordination. This paper, dated 2 June, Subject: Field Exercises, Women (FEW), proposed an approach that was incorporated essentially into REF WAC. The proposal was that FEW, should consist of a three-pronged attack on the problem as follows:

"a. Daily data collection at the company level by NCO's acquainted with faces and personalities of the soldiers being tracked. This data would include lost time (and reasons) for all women and (at least) a matching set of male soldiers, and would include the recording of pertinent logistical and environmental problems and results.

"b. ARI collateral research instruments administered at the CONUS locations of units--immediately before and after REFORGER, but after all new personnel are assigned and while all (any) add-ons are still attached. In addition to the formats and approaches used in the MAX WAC collateral research, rating sessions to obtain officer and NCO evaluation of platoons, sections, and/or squads should be obtained. The MAX WAC instruments will require some modification (and additions).

"c. Four person FEW teams, constituted much like the MAX WAC teams, with a branch qualified Major in charge, a branch qualified Captain as his assistant, a woman Captain, and a combat arms Captain included in the team, deployed with field equipment during the 3 weeks field exercise to evaluate performance. Although the general MAX WAC approach for using expert judgment of the same team member to evaluate several

units with differing content of women will be utilized, several important changes are required. Since targets of opportunity will afford the testing situations, rather than having a carefully prearranged and controlled standard scenario (as the MAX WAC ARTEPs), and since the same event/situation will be scored several times (3 or 4) for the same group, when available at several different times in the 3-week period, the existing scoring procedures and scoring aids will have to be modified for use in the FEW. It is anticipated that FEW teams will be directed to the locations where the desired groups and event/situations are most likely to occur; one team member may remain in the most appropriate headquarters for effecting this dispatching of the FEW team. The FEW team may also be used to score event/situations expected to occur at such key locations as the docks--before and after the field exercise."

Initial guidance did not permit consideration of USAREUR units which were also participating in REFORGER 77. Since only one 1st Division MP company was scheduled to participate, it did not at first appear feasible to include MP units in the investigation. The REF WAC 77 concept was developed further in the 2 June discussion paper in the following words:

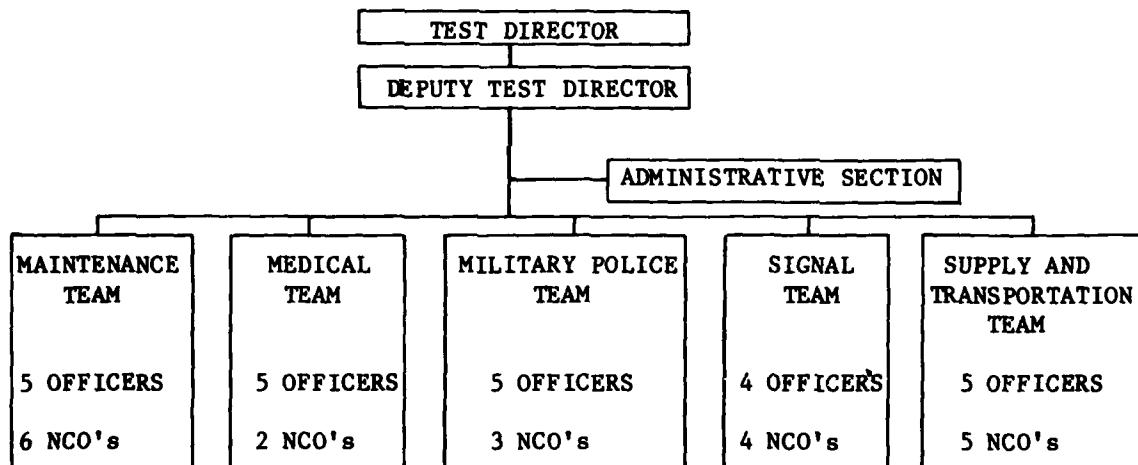
"The data collection during the field exercise should focus on the signal, maintenance, transportation/supply and medical battalions. MP units are in short supply. A FEW team would rove over one battalion --- testing platoons, sections, or squads in pre-selected (and carefully documented with scoring aids, etc.) event/situations. Each event/situation would have a specified size group for which a test is to be conducted and all such groups with their content of women would be carefully noted in advance. Only tests which have potential for contrasting groups with widely different content of women would be used. If possible, some groups should have half or more of the E-5 or below soldiers be women. Every test (event/situation) is unambiguously bounded in time and the group well defined with number of participants and content of women clearly apparent. It would be hoped that an event/situation can be tested on a dozen groups at several points during the 3-week field exercise. Several statistical contrasts would be made. Groups with all men would be contrasted against groups with significant numbers of women. Groups having women would have their performance contrasted across successive 3-day periods, and groups with all men would have similar comparisons made."

The concepts of the 2 June paper were incorporated into the 30 June Research Resource Requirements (R<sup>3</sup>) document cited above. This R<sup>3</sup> and the 27 June DA Headquarters letter provided the charter for further coordination with DA and MACOM elements and became the basis for the research design, data collection procedures, and statistical analysis of REF WAC 77. The REF WAC Test Directorate was activated 11 July 1977; the

delay was primarily to permit coordination to reach a point where other Army elements could be tasked to support REF WAC 77. The REF WAC 77 Test Directorate was composed of 50 personnel (Table II-1). These personnel were organized into a directorate headquarters and five observer teams (maintenance, medical, military police, signal and supply and transportation). Each observer team consisted of a team chief (branch qualified), combat arms officer, female officer, and two (except the signal team, which had one) other branch qualified officer personnel. From activation on 11 July 1977 through 1 September 1977, REF WAC 77 Test Directorate personnel were identified, attached, and oriented at the U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA. Officer and NCO members of the Test Directorate were brought together on TDY basis from installations and activities throughout CONUS. Several officer members of the Test Directorate were carried over from the preceding MAX WAC effort.

Table II-1

REF WAC TEST DIRECTORATE



A task force of ARI scientists was assembled as of 5 July 1977 to provide the more detailed planning required to initiate a joint civilian-military effort; to define rating module tasks; and to prepare corresponding standards, rating procedures, and forms for use by officer evaluators in rating group event performance on ARTEP-like tasks. Contractors were brought aboard to augment the in-house scientists in working with the military Test Directorate teams, permitting the in-house scientists to focus on other instrument preparation. Since the Test Directorate was still in process of being formed, the scientific staff made the initial contacts with NCO data collectors and worked with them in the collection of nondeployability data and in the selection of the male cohort.

Whenever possible, the NCO data collectors were brought into ARI for an orientation session with the scientific staff. A similar relationship with the three NCO data collectors assigned to USAREUR MP units (beginning on 17 August 1977) was established by the scientific staff of the ARI field unit located in Heidelberg, Germany. Seven more NCO data collectors were sent to two USAREUR battalions on 27 August 1977 when it became apparent that a broader data base was desirable. Pre-exercise questionnaires were administered by the scientific staff to all participating units just prior to their departure from their home installations, both in Europe and at Fort Riley, KS.

Two observers from ADMINCEN were integrated into the data collection teams during the field exercise. One remained to assist ARI scientific staff in collection of post-exercise questionnaire data.

The Test Directorate officers were responsible for collecting performance ratings on both ARTEP-like group events and Soldier's Manual-type individual events. In addition, all Test Directorate personnel were to make unstructured observations of events relevant to REF WAC objectives. The evaluations of the REF WAC officers and NCO's made a different contribution to the final pool of information from that provided on questionnaires by unit officers. REF WAC officers were full-time observers who stood apart from the action and were completely free to evaluate, without the question of personal responsibility for the state of training, etc., of the enlisted men and women.

An advance party of the Test Directorate departed for USAREUR on 18 August 1977. The advance party obtained billeting arrangements for the remainder of the Directorate, assisted in administration of pre-exercise questionnaires to members of USAREUR-based units, and located facilities to be used as a Test Directorate Command Post (CP). Deployment of NCO data collectors from Fort Riley, KS. to USAREUR occurred 30 August 1977. Deployment of officer evaluators from Alexandria, VA. was phased by anticipated team needs 22 August - 8 September 1977.

The REF WAC 77 Command Post (CP) became operational 1600 hours 2 September 1977. The CP was located at Wiley Barracks, Neu Ulm, West Germany. This location was sited just outside the actual field exercise area for coverage of both sides of the exercise forces by REF WAC 77 observers. Officer evaluators were physically located in communities in close proximity to their respective units.

The exercise area in which REF WAC 77 observations generally were made was approximately 65 km (N-S axis) wide and 140 km (E-W axis) long, and situated south of the Stuttgart-Munich Autobahn. The Forward Edge of the Battle Area (FEBA) along which the Orange and Blue forces faced off for the start of the CARBON EDGE exercise ran approximately north of Ulm, along the Iller River.

The military police and supply and transportation teams observed individuals and units on both sides of the exercise. Medical and signal teams observed battalions organic to the 1st Infantry Division (Blue Forces) only. The maintenance team observed a 1st Infantry Division battalion and a USAREUR non-divisional maintenance battalion, both located on the Blue Forces side.

The major research effort was focused on field activities commencing with the movement of exercise units into initial assembly areas and terminating with the conclusion of Exercise CARBON EDGE. During the period 25 July - 23 September 1977, REF WAC Directorate and members of the ARI scientific staff observed women in the Army during the conduct of REFORGER 77 and Exercise CARBON EDGE.

Recorded observations by Test Directorate personnel ceased with the termination of Exercise CARBON EDGE. All CONUS NCO data collectors departed Germany for ARI on 26 September 1977 to permit debriefing and interviews by the scientific staff. USAREUR NCO data collectors were interviewed and debriefed at Wiley Barracks and returned to home stations directly. Some officer evaluators, essentially a rear party, assisted the ARI scientific staff in administering post-exercise questionnaires to all participants.

As of 5 October 77, all REF WAC 77 NCO data collectors had returned to home stations. On 11 October 1977 all officer evaluators had returned to ARI and initiated a coordinated final after-action report writing effort. All teams completed final reports on 14 November 1977. The final military report by the Test Directorate was submitted to the Commander of ARI prior to the In Process-Review briefing provided by the Test Director to military and civilian Department of the Army and Department of Defense managers on 6 December 1977. A summary of this final military report is provided as Part IV of this report.

In November 1977 ARI scientists interviewed 40 female soldiers at Fort Riley who had participated in REFORGER. The substance of these interviews is summarized in Part V.

### 3. RESEARCH DESCRIPTION

#### a. Research Design.

A primary impetus for having a REF WAC 77 came from the contention of many that a three-day ARTEP did not provide an adequate test bed for determining the effect of enlisted women on unit performance in the field. Some believed that enlisted women's performance would deteriorate over an extended period of time. Therefore, the determination of whether changes in performance over time did in fact exist, and whether any observed changes differed for enlisted men and women, was essential to an informed interpretation of MAX WAC results. The need to compare EM and EW performance trends over time was obvious, and provision was made for several such direct comparisons. Research hypotheses can be summarized as follows:

#### Primary Null Hypothesis:

No difference between all-male and mixed groups (groups containing one or more EW).

- (1) No difference in performance trends over time between all-male and mixed groups.
- (2) No difference in performance between all-male and mixed groups at each point in time.

#### Secondary Null Hypothesis:

No difference, as described above, between individual EW and matched individual EM.

Two major constraints were placed upon the execution of this design:

- (1) Noninterference with unit personnel assignments prior to exercise-i.e., no prescribed fills of EW, or guidance on who went on REFORGER 77.
- (2) Noninterference during exercise-i.e., no scenario introduction or other presentation of special tasks. All scored events were targets of opportunity.

However, the following were permitted:

- (1) Deployability interviews before the exercise.
- (2) Pretest and posttest questionnaires administered before and after the exercise.
- (3) Questioning of participants, without interference with duties, during exercise.



(4) NCO data collectors allowed to live with companies.

(5) Officer evaluator teams permitted access to company areas.

b. Sample

The sample for this research consisted of Army personnel in selected units participating in REFORGER 77. Initially, the sample was to consist of soldiers from the 1st Infantry Division deploying from Ft. Riley. Due to an insufficient number of female soldiers in the 1st Infantry Division, some Europe-based combat support and combat service support units were included. Approximately 1500 personnel were from Riley-based units, and about 1400 personnel were from Europe-based units. The battalions and separate units participating in the research are shown below.

(1) Battalions and a separate company of the 1st Infantry Division deploying from Ft. Riley:

1st Medical Battalion  
1st Supply and Transportation  
1st Military Police Company  
701st Maintenance Battalion  
121st Signal Battalion

(2) Battalions and separate units from USAREUR:

3rd Military Police Company  
385th Military Police Battalion  
1st Military Police Detachment (Forward)  
1st Maintenance Battalion  
3rd Supply and Transportation

Thus, there were five types of combat support and combat service support units involved in the research: maintenance, medical, military police, signal, and supply and transportation.

Three subsamples of Army personnel from these companies participated in the research:

(1) Officers. Commissioned officers and warrant officers.

(2) NCO's. Noncommissioned officers in paygrades E-5 to E-9 in supervisory positions.

(3) Enlisted personnel. Soldiers in paygrades E-1 to E-4 and E-5's in nonsupervisory positions.

Questionnaires were administered to all three subsamples, but other aspects of the research effort focused primarily on the enlisted personnel subsample. Several kinds of comparisons of enlisted women and enlisted men were made, in accordance with the fundamental design principle of REF WAC. This principle revolved around the requirement for comparability of male and female performance data. One type of comparison involved the daily performance of all female soldiers (the female cohort) with a group of matched male soldiers (the male cohort). Members of the male cohort were selected by matching, as closely as possible, a male to each female in the female cohort on the basis of rank, length of service, MOS, age, and GT scores.<sup>3</sup> In a second type of comparison, an individual female's performance was matched with the performance of a male doing the same task. A third kind of comparison was made on group performance: the performance of groups containing one or more females was compared with the performance of all-male groups. Another type of comparison dealt with reasons for nondeployability of the enlisted women and men who were declared nondeployable.

After the field training exercise was completed, the amount of stress under which a company operated during Exercise CARBON EDGE was identified as a factor which might have affected male and female performance differentially, thus influencing comparisons among the above identified sets of personnel. In several respects CARBON EDGE did not present the difficulties that might occur in a real combat situation: the weather and terrain were generally favorable; several companies had light workloads that limited opportunities for performance evaluation; and, because a number of companies did not move, much heavy work did not occur. Hence, it was deemed necessary to consider the possible effects of stress.

Accordingly, an attempt was made to identify those companies which experienced the greatest amount of stress during the exercise. It was impossible to take into consideration all of the factors that might account for stress. Therefore, two sources of available information were used: (a) the "condition score" or "environment score" on a scale from 0 (normal conditions) to 3.0 (the most adverse conditions), which was recorded by the officer evaluator for each group event rating and individual event rating, and (b) the recorded number of times each company moved.

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<sup>3</sup>Selection of male and female cohorts was intended to enable direct comparisons of daily performance between EM and EW. For each deployable female in the units to be observed, a matched male from the same company was selected of the same paygrade, who was within three months of the same length of service, in the same Primary MOS (PMOS) or at least in the same career field, within two years of the same age, and with a similar GT score. This procedure was repeated until every female soldier was matched with a male soldier from the same company. These male and female groups constituted the male and female cohorts. Detailed instructions used for selecting the male cohort can be found in Appendix A, pages A-164 to A-168.

The data revealed that six companies moved two to five times during the field exercise and other companies had not moved. Average conditions scores were computed for all companies and placed in rank order. Five of the six companies that moved had higher average scores than any company that did not move. The average conditions score was .87 for the six companies that moved, and .49 for the 19 companies that did not move. Because of this agreement between conditions scores and moving, it was concluded that "high stress" could be defined on the basis of moving during the exercise and "low stress" on the basis of not moving.

In addition to the factor of stress, the type of task was also identified as a possibly important factor in comparisons related to group event ratings and individual event ratings. Tasks were divided into two types: common and unique. Common tasks involved sustenance and tactical activities engaged in by all types of units, e.g., erecting tents, KP, and guard duty. Unique tasks, on the other hand, involved MOS-related jobs, many of which were performed primarily by one type of unit. The term "MOS-related" refers to the unit's technical mission for supporting the combat brigade. Examples of unique tasks are generator repair (maintenance units), transporting supplies (supply and transportation units), and transporting wounded (medical units).

#### c. Instruments

A number of different instruments were constructed to collect data concerning the effect of the extended field training exercise on performance and mission accomplishment by combat support and combat service support units. These instruments included the following:

- (1) Group event rating form.
- (2) Individual event rating form.
- (3) Daily record of work availability and performance (Schedule 4).
- (4) Pretest officer questionnaire.
- (5) Pretest NCO questionnaire.
- (6) Pretest enlisted questionnaire.
- (7) Posttest officer questionnaire.
- (8) Posttest NCO questionnaire.
- (9) Posttest enlisted questionnaire.

- (10) Supervisors' supplemental questionnaire.
- (11) Company deployability record (Schedule 1).
- (12) Worksheet for individual deployability (Schedule 2).
- (13) Enlisted deployability interview schedule (Schedule 3).
- (14) Critical incident report form.
- (15) Topical outline for REF WAC Test Directorate Team ("after action") reports.
- (16) Interview schedule for NCO data collectors.
- (17) Interview schedule and self-report inventories for enlisted women participants.

The major data collection instruments and the time period of their utilization in REF WAC 77 are depicted in Table II-2. Instructions and procedures were prepared for each of the data collection instruments. Time constraints required that the instruments to be used in the pre-exercise and exercise periods be prepared first. Consequently, the "posttest" questionnaires (for use after the exercise) were still being devised during the pre-exercise period, and the prescribed formats for officer team reports and debriefing interviews were finalized during the exercise. Examples of these data collection forms are provided in Appendix A.

#### (1) Performance Rating Forms.

Three instruments were used for recording ratings of performance: The "Group Event Rating Module" form, the "Individual Event Rating Module" form, and the "Daily Record of Work Availability and Performance, Schedule 4." The ratings were used to compare across time the performance of various subgroups of female and male soldiers. The time periods employed in the analyses were defined as follows:

Pre-FTX - Ratings made prior to 13 September.

Beginning-FTX - Ratings made during the first part of the FTX on 13-15 September.

Middle-FTX - Ratings made during the middle part of the FTX on 16-18 September.

End-FTX - Ratings made during the final part of the FTX on 19-22 September.

Group Event Rating Form. This form was used by officer evaluators to rate group performance. An example of the group event rating module form is shown in Appendix A, pages A-1 and A-2. Groups generally contained fewer than 10 enlisted soldiers and were composed either of (a) all males, or (2) "mixed" male-female groups (containing one or more females). Field teams were asked to seek, for each all-female or mixed group rated on group event rating modules, an all-male group matched on mission and experience that could be rated on the same group event rating module by the same evaluator. Also, each such pair of groups was, whenever possible, to be rated on the same event (and by the same evaluator) at least once during the first three, the middle three, and the last four days of CARBON EDGE. This design can be depicted as shown in Table II-3.

Table II-2

REF WAC 77 DATA COLLECTION INSTRUMENTS AND PROCEDURES

PRE-EXERCISE	EXERCISE (CARBON EDGE)	POST-EXERCISE
Pretest Questionnaires (Officer, NCO, Enlisted)	Group Event Rating Modules (ARTEP-like Tasks)	Posttest Questionnaires (Officer, NCO, Enlisted)
Deployability Forms: Company Records Supervisor Interview Nondeployable interview	Individual Event Rating Modules (Soldier's Manual & Individual Tasks)	Supplemental MTOE Questionnaire for Supervisors
Data Forms For Selecting Male & Female Cohorts	Daily Record of Work Availability and Performance	NCO Data Collector Interview Form
	Critical Incident Forms	Form for Interview of Female Soldiers Participating in REFORGER
		Female Soldier Self-Description Inventories
		Officer Team Reports

Table II-3

## IDEAL SCHEDULE FOR GROUP EVENT RATINGS

Event	Evaluator	Group Composition	Day of Exercise		
			1-3	4-6	7-10
Same	Same	Same all-female or mixed gender group	≥1	≥1	≥1
Same	Same	Same matching all-male group	≥1	≥1	≥1

The noninterference constraints placed on the REF WAC officer evaluators required them to select groups to be rated as targets of opportunity. They were told to focus, whenever possible, on events that would most likely recur for an all male or mixed group and for one or more matching all-male groups.

Group events were primarily selected from the list of ARTEP tasks used in MAX WAC, although other events were included that were believed to be: sensitive to E5 and below E5 performance and relatively insensitive to E6 and above E6 supervisory performance; likely to occur more than once; scorable according to TRADOC or other generally recognized performance standards; and likely to involve female or mixed groups.

Each group event rating module had its own unique set of standards recorded on the back of each form. All ratings were made on a seven-point scale on which the points 2, 4, and 6 were always defined in terms of the standards. Point 1 was usually defined as noticeably worse than 2, 3 as lying between 2 and 4, 5 as lying between 4 and 6, and 7 as noticeably superior to the standard defined at 6. However, some group event rating modules defined all 7 points in terms of the standards. Contractors prepared 141 group event rating module forms, each with a separate set of performance standards, in consultation with Test Directorate personnel and as directed by ARI scientists. The expectation was that the corresponding events would occur and be observed during the exercise (see Table II-4). A total of 43 group event rating modules was not utilized. The same set of sustenance and tactical rating modules was used for all types of companies. The other modules were unique to each type of company. For example, the REF WAC team which evaluated the maintenance companies had a total of 37 distinct rating modules (7 maintenance unique, 19 sustenance, and 11 tactical) available for its use. Only seven unique modules were required for the maintenance companies because each module covered a broad class of repair of types of equipment. In contrast, the other types of companies needed from 18 to 39 unique rating modules.

Table II-4

## GROUP EVENT RATING MODULES: FREQUENCY OF USE

Type of Module	No. Modules	Frequency of Use			
		0	1-10	11-20	21-30
Unique:					
Maintenance	7	1	4	2	
Medical	39	9	26	4	
Military Police	25	18	4	2	1
Signal	18	3	8	7	
Supply and Transportation	22	10	8	1	3
Common:					
Sustenance	19	1	53	5	
Tactical	<u>11</u>	<u>1</u>	<u>24</u>	<u>1</u>	
Totals	141	43	127	22	4

A performance rating was based on the actual performance of the group without taking into account any aspect of the situation, such as weather, which could have depressed the level of performance. Thus, a "conditions" score was also recorded. The evaluator noted the impact of conditions such as darkness, adverse terrain, etc. which might have had a negative effect on the group performance. The conditions score was on a seven-point scale, ranging from 0 to 3 with half-point increments. The evaluator assigned a total conditions score sufficient to make a given performance situation equivalent in difficulty to performance under the best (easiest) conditions. After recording the overall conditions score, the evaluator was to break out the contribution of separate condition factors within the total conditions score he had recorded. A maximum of three points could be recorded for the total conditions score and each of the separate factors.

Those who turn to the group event rating module example in Appendix A will note the inclusion of a place to record a "moderator score." This score permitted the evaluators to indicate their opinion of how well the rated performance represented the real abilities of those being rated. A "3" indicated close correspondence, and a "1" indicated very poor correspondence. This score was not used in the analyses for this report but will be included in more complex analyses at a later date.

Individual Event Rating Form. Members of the female cohort and males performing the same tasks were rated by REF WAC officer evaluators using individual event rating module forms. An example of this form can be found in Appendix A on pages A-3 and A-4. The individual event rating form contained scoring criteria (to be rated "satisfactory" or "unsatisfactory") that were equivalent, wherever possible, to those provided by TRADOC for Soldier's Manual tasks. The overall performance rating on the task was based on a seven-point scale which incorporated key words and phrases from the operational Enlisted Evaluation Report (DA Form 2155-5). This rating scale is shown in Table II-5. One hundred thirteen individual event rating modules were prepared by the Test Directorate personnel. As seen in Table II-6, all but 43 modules were used at least once during CARBON EDGE.

Table II-5

PERFORMANCE RATING SCALE

Rating	Description of Type of Performance
7	Performed all tasks in a superior manner; equivalent to the performance of an outstanding soldier
6	Performed most tasks in a superior manner, all others at minimum standards equivalent to the performance of superior soldier
5	Performed some tasks in a superior manner, all others at minimum standards equivalent to the performance of an excellent soldier
4	Performed all tasks at minimum standards; equivalent to the performance of an average soldier
3	Performed most tasks at minimum standards; some tasks were failed; equivalent to the performance of a marginal soldier
2	Performed a few tasks at minimum standards but most were failed; equivalent to the performance of an unsatisfactory soldier
1	Performed all tasks in an inferior manner; performance so poor that if the individual always performed this way you would question his/her MOS qualification



Table II-6

INDIVIDUAL EVENT RATING MODULES: FREQUENCY OF USE  
(SOLDIER'S MANUAL TASKS)

Type of Module	No. Modules	Frequency of Use				
		0	1-10	11-20	21-30	Over 30
Unique:						
Maintenance	7	1		3	3	
Medical	25	8	17			
Military Police	13	6	2	2	1	2
Signal	7		1	1		5
Supply and Transportation	30	15	15			
Common:						
Sustenance	<u>31</u>	<u>13</u>	<u>9</u>	<u>3</u>	<u>1</u>	<u>5</u>
Totals	113	43	44	9	5	12

The selection of the male cohort for comparison with female soldiers for collection of data on nondeployability, daily supervisory ratings, and nonavailability had been largely accomplished before the use of individual event modules in REF WAC had been considered. Thus, the matching of males was accomplished on such factors as grade, time in the Army, and age, in addition to MOS. This procedure did not always provide a matched man and woman who would be given similar assignments on REFORGER and thus be available for comparisons on individual event ratings. Some members of the male cohort were assigned to FAST or Contact teams<sup>4</sup> which not only placed the men on work that was not comparable to that assigned to the enlisted women, but also may have placed them too far away for observation or rating by either the NCO data collectors or the officer evaluators. For this reason, the officer evaluators were to select for each female soldier, on whom an individual event rating was obtained, any male soldier performing the same task and who was as similar to the female as possible.

<sup>4</sup>Supply and transportation FAST (forward area support team) and maintenance Contact (now called MST for maintenance support team) teams operate forward of the combat brigade rear boundaries well beyond most support unit activities.

The individual event rating form also provided for an "environment score." This rating was on a three-point scale (optimal, mildly adverse and severely adverse conditions).

#### Daily Record of Work Availability and Performance (Schedule 4).

The seven-point scale used by NCO supervisors to record ratings of enlisted women and members of the male cohort was the same as for the individual event rating modules (see Table II-5). The ratings were to be collected daily from the regular everyday working group supervisor and/or the supervisor of special details to which the soldier may have been assigned. Nonavailability data were collected from the supervisor at the same time on the same "Daily Record of Work Availability and Performance, Schedule 4" form. (See Appendix A, page A-5).

(2) Questionnaire Data. As was shown in Table II-2, questionnaires were administered to personnel in the participating REF WAC companies both before ("pretest") and after ("posttest") the field training exercise. These collateral research instruments contained items on topics such as the utilization of women, morale, attitudes toward combat, differential treatment of men and women, and evaluation of job performance during CARBON EDGE. In addition, the questionnaires also requested background information on the respondent such as age, education, sex, physical condition, and size of everyday work group. Questionnaire content is summarized in Table II-7. Copies of the pretest and posttest questionnaires are on pages A-6 to A-104 of Appendix A.

Separate pretest and posttest questionnaires were designed for officers, for NCO supervisors, and for enlisted personnel. With the exception of an item concerning paygrade, the officer and NCO questionnaires were identical. Many of the items on the enlisted and the officer/NCO questionnaires were the same or very similar. However, some items, such as one asking the respondent to assess the importance of various factors in the accomplishment of a unit's combat mission, appeared solely in the officer/NCO questionnaires. The items were considered appropriate only for officers or NCO's because these individuals had had command and supervisory experience. Analysis of pretest and posttest questionnaires was focused on the posttest, although some pretest-posttest comparisons of attitudes, opinions, and descriptive data were made.

Collateral instruments are summarized in Table II-8. In addition to the posttest questionnaire, officer and NCO supervisors also completed a "supplemental" questionnaire. There were 22 different forms of the supplemental questionnaire. Each form of this questionnaire contained a different set of MOS which represented the MTOE of a particular company or group of companies. The items on the supplemental questionnaire dealt with two aspects of assigning women to MOS:

Table II-7

## SUMMARY OF QUESTIONNAIRE CONTENT

Type of Item	Number of Items			
	Enlisted Pretest	Officer/NCO Pretest	Enlisted Posttest	Officer/NCO Posttest
Participation in REFORGER	3	3	2	3
Deployment	2	2	3	2
Job performance	2	4	12	15
Training readiness	12	0	2	0
Morale	1	0	1	0
Helping behavior	10	4	10	4
Leadership	2	2	2	2
Differential treatment	6	6	5	5
Efficacy of REFORGER	2	2	2	2
Combat attitudes	3	4	3	4
Amount of work and sick call	3	2	3	3
Attitudes toward women	8	8	8	8
Career commitment	1	1	1	1
Background information	<u>29</u>	<u>10</u>	<u>31</u>	<u>11</u>
Total	84	48	85	60

Table II-8  
COLLATERAL RESEARCH INSTRUMENTS  
(QUESTIONNAIRES)

Instrument	No. Items	Subjects	No. Forms Completed
Enlisted Pretest	84	E1-E5	2070 (1719) <sup>a</sup>
NCO Pretest	48	E5-E9	509 (439) <sup>a</sup>
Officer Pretest	48	Commissioned and Warrant	142 (134) <sup>a</sup>
Enlisted Posttest	85	E1-E5	1181
NCO Posttest	60	E5-E9	499
Officer Posttest	60	Commissioned and Warrant	149
Supplemental	4 Background 5 MTOE Assg Distribution 1 Check List	Supervisors: E5-E9 Officers	393 170

<sup>a</sup>Said "Yes" to question "Are you going on REFORGER?"

(a) Appropriateness of women for company MOS. Pages 3-7 directed the the respondent to allocate a given number of women or men across the set of MOS authorized for his or her company. The allocations were made for five different levels of female/male fill when 10%, 35%, and 50% of the total were females and when 10% and 35% of the total were males. Results were used to identify assignment objectives of the respondents.

(b) Physical difficulty of MOS for average woman. Page 8 of the supplemental questionnaire asked the respondent to check the MOS which present problems for women because of the physical requirements of the job.

An example of a supplemental questionnaire form can be found on pages A-105 to A-114 in Appendix A.

(3) Other Data.

As depicted in Table II-2, several forms were used to collect data other than performance ratings and questionnaire responses. These forms were concerned with obtaining information on deployability, work availability, and critical incidents, and also with collecting interview data from NCO data collectors and interview and self-report data from female participants.

(a) Deployability.

Company records and ramp manifests were used by the NCO data collectors to collect enlisted deployability data. This information was recorded on "Company Deployability Record, Schedule 1" (See Appendix A, pages A-115 to A-118). The NCO data collectors entered the deployability data on this form each week for six weeks before the field training exercise began. The information included: numbers of EM and EW classified as deployable for REFORGER, the number of personnel classified as deployable but on standby or going with another unit, the number and names of nondeployable men and women and the reasons therefore, and the number and names of people attached to the company for the purpose of deploying with that company on REFORGER.

As a follow-up, the nondeployable soldiers and their supervisors were interviewed by the NCO data collectors. Essentially, the interviews attempted to ascertain the real reason for the nondeployability decision with respect to the soldier from the supervisor's perspective and from the soldier's perspective. The interviews were also an effort to investigate how deployability decisions were made, who made them, and how much the soldier knew and understood about this decision-making process. Another purpose of the interviews was to collect more detailed background information about the nondeployable soldier. The forms used in these interviews are contained in Appendix A. See pages A-119 and A-120 for "Schedule 2," the interview schedule used for interviews of supervisors. For "Schedule 3," the form used for interviews of nondeployable persons, see pages A-121 to A-124.

(b) Work availability.

The "Daily Record of Work Availability and Performance, Schedule 4," the form used for the supervisors' daily performance ratings, was also used to obtain information on the work availability of members of the male and female cohorts. The total number of assigned hours, the number of hours the person was not available, and the reason for any nonavailability were recorded on Schedule 4. This form is on page A-5 in Appendix A.

(c) Critical incidents.

The Critical Incidents Report form was developed by the REF WAC Test Directorate for the recording of incidents believed to impact on task accomplishment. Critical incidents involved instances such as insubordinate behavior, accidents, supervisory failure, and poor morale. Adverse conditions (or lack of adverse conditions) were recorded on the form along with the presumed cause of the incident and the source of information about the incident. A critical incident report form can be found on pages A-125 and A-126 of Appendix A. This form prescribed a reporting format and helped to emphasize the importance of reporting all incidents of a certain class regardless of whether they occurred in all-male, all-female, or mixed gender groups.

(d) REF WAC Test Directorate team ("after-action") reports.

Each of the five REF WAC Test Directorate teams (maintenance, medical, military police, signal, and supply and transportation) prepared reports summarizing their observations, drawing conclusions, and making recommendations based on their REFORGER 77 experiences. The exact format of these "after-action" reports was not specified beyond a list of 10 topics which the teams were asked to address in their reports. These topics were:

- (1) Personnel data.
- (2) Individual event scoring modules.
- (3) Group event scoring modules.
- (4) Critical incidents.
- (5) First line supervisors' reports.
- (6) NCO data collectors reports.
- (7) Assessment of performance.
- (8) Recommendations for REF WAC 78.
- (9) Lessons learned.
- (10) General comments.

(e) Interview schedule for NCO data collectors.

After the completion of the field training exercise, debriefing interviews were held with the NCO data collectors concerning data collection procedures and conclusions the data collectors had drawn concerning the role of women in the Army. A copy of these questions is on page A-127 of Appendix A.

(f) Interview schedule of enlisted women participants.

A group of female soldiers who had participated in REFORGER were later interviewed to obtain information on the factors related to their level of performance. Of the 40 women interviewed, half had received high performance ratings, and half had received low performance ratings. A copy of the questions used in these interviews is given on pages A-128 and A-129 of Appendix A. Prior to the interviews, the women completed three self description instruments: "Self-Description Inventory-Form 1," "Self-Description Inventory-Form A," and "Self-Ratings of Performance." Copies of these instruments can be found on pages A-130 to A-163 in Appendix A.

d. Procedure

(1) Group event ratings. The group event rating modules described above were used by the REF WAC officer evaluators to rate groups of soldiers on ARTEP-like tasks. The intent was for each evaluator to rate personnel in the same set of units. Since the units were geographically separated, it was necessary for the evaluator to travel from location to location and to rate whatever groups he or she could find that were performing a task for which group event rating modules existed. Because the evaluators had to travel (and transportation was not always available

at the times needed) and because there could be no control by the REF WAC team over the types of tasks to be performed, the observations were less systematic and complete than was desirable. The groups evaluated were typically composed of two to four people, although some groups consisted of only one person while others may have included 10 or more people.

In making the group event ratings, the evaluators judged the actual performance of the group (on a scale of 1-7) without taking into account any aspect of the situation (such as weather) which might have operated to depress the level of performance. Then, in addition to the performance rating, a "conditions" score was recorded (on a scale of 0-3) which reflected the impact of environmental conditions such as adverse weather, darkness, etc. which the evaluator felt had a deleterious effect on group performance. Another score, a "moderator variable" score, was also recorded. This score represented the evaluator's judgment of the validity of the ratings.

Thus, the final assessment of the group performance included: a raw or unadjusted performance rating (on a scale of 1-7) based on the absolute performance of the group, a conditions score (on a scale of 0-3) which estimated the effect of adverse conditions, and a moderator variable score (on a scale of 1-3) which indicated the certainty of the evaluator's judgment. The performance rating used in the analyses of the data, the results of which are presented in Part III, was an additive "adjusted" rating, i.e., the rating on the seven-point scale plus the conditions score.

The group event rating module form had a place for recording the names of women soldiers participating in an event being scored. Thus it was possible to tabulate the number of women observed in the group events (see Table II-9). Note that for a total of 229 enlisted women, 187 were observed at least once. Those never observed may have had assignments not covered by any of the group event rating modules. Most of the women not observed in group events were observed as individuals using the individual event rating modules.

Table II-9

GROUP EVENT RATING MODULES: FREQUENCY OF OBSERVATION OF EW

Type of Unit	Total EW	Observed EW	Frequency of Observation					
			1-2	3-4	5-6	7-8	8-9	Over 10
Maintenance	61	59	8	4	24	16	0	7
Medical	20	16	0	4	1	0	2	9
Military Police	46	33	9	12	4	2	2	4
Signal	49	36	4	4	7	6	7	8
Supply & Transportation	<u>53</u>	<u>43</u>	<u>8</u>	<u>15</u>	<u>6</u>	<u>4</u>	<u>2</u>	<u>8</u>
Totals	229	187	29	39	42	28	13	36

(2) Individual event ratings. The individual event rating module forms previously described were the forms used by the REF WAC officer evaluators to rate members of the female cohort as individuals. After the female had been observed, a male doing the same task was also rated on that task. This comparison male was not necessarily a member of the male cohort or, if he happened to be, he was probably not the male matched to the female being observed. The criterion was that the male was to perform the same task as the female and, when choice was possible, an attempt was made to select a male as similar to the female in rank, age, etc. as possible. The officer evaluator first rated each scoring criterion as "satisfactory" or "unsatisfactory" and then rated the individual's overall performance on the seven-point scale described in Table II-5. In addition, the officer recorded an environment score (on a scale of 0-3) which assessed the degree to which environmental conditions had adversely affected the person's performance. The performance rating used in the analyses of the individual event data was an "adjusted" rating, i.e., the raw performance rating plus the environment score.

It should be noted that ARI was directed to emphasize the group performance measures. Accordingly, a smaller number of enlisted women were observed individually using the individual rating modules based on Soldier's Manual tasks (as contrasted with those observed in groups using the group performance measures). ARI's REF WAC charter permitted using these individual measures only insofar as they would not interfere with pursuing the group event measures. Many of the enlisted women who were only sparsely represented in the group events were deliberately evaluated at least once using the individual measures--thus increasing the total number of enlisted women observed. A total of 123 enlisted women was evaluated at least once using the individual event rating modules. (See Table II-10 below).

Table II-10

INDIVIDUAL EVENT RATING MODULES: FREQUENCY OF OBSERVATION OF EW

Type of Unit	Total	Observed	Frequency of Observation					
	EW	EW	1-2	3-4	5-6	7-8	9-10	Over 10
Maintenance	61	28	11	13	1	1	2	0
Medical	20	13	3	2	0	3	3	2
Military Police	46	34	17	11	3	3	0	0
Signal	49	24	4	5	7	2	3	3
Supply & Transportation	53	24	5	13	2	1	0	3
Totals	229	123	40	44	13	10	8	8



(3) Daily performance ratings and work availability. The NCO data collectors were responsible for collecting, on a daily basis, information from supervisors about members of the male and female cohorts.

For each individual each day, the NCO data collector recorded: (1) a performance rating on the seven-point scale (see Table II-5) and (2) the number of hours the person was available or nonavailable for work and, if nonavailable, the reason why.

(4) Pretest and posttest questionnaires. Questionnaires were administered before ("pretest") and after ("posttest") the field training exercise. The pretest questionnaires were administered at Ft. Riley and in Germany to deployable personnel in the units participating in the REF WAC 77 research. These questionnaires were administered by ARI or Test Directorate personnel. On the pretest, the questionnaires were generally completed in mess halls or classrooms. For the posttest, questionnaires were administered under field conditions in Germany. A variety of locations were employed for posttest administration--mess tents, sleeping tents, athletic field stands, open fields, hallways, classrooms, and an auditorium were all used for completing posttest questionnaires.

Standardized instructions were employed during the pretest administration of the questionnaires. For the posttest, it was often not possible to administer the questionnaire under standardized conditions. Noise interference or the fact of being outdoors frequently made it difficult for the soldiers to hear instructions. Since the participants in the field training exercise had previously completed the pretest questionnaire, this lack of standardization in posttest administration was considered less crucial than it would have been on the pretest. As a consequence, when operating under very difficult environmental conditions, the test administrator would abbreviate the oral instructions or, in some cases, virtually eliminate them and rely upon the instructions printed in the questionnaire.

(5) Supplemental questionnaires. Supplemental questionnaires were administered to unit officers and NCO supervisors immediately after they had completed their posttest questionnaires. Each officer or NCO copied the questionnaire booklet number on his or her posttest questionnaire onto his or her supplemental questionnaire. Thus, data from both instruments could be collated for each individual.

(6) Critical incidents. Incidents believed to be critical to task performance were recorded by officer evaluators. The officer evaluators generally reported incidents which they had personally observed, but occasionally they reported incidents which had been observed by another reliable source. Typically, critical incidents were events which interfered with task performance. Occasionally, an incident was recorded which had had a positive effect on the accomplishment of a task.

Given the noninterference aspect of the research and the other duties required of them, the officer evaluators could not record critical incidents in any systematically meaningful way. Accordingly, the incidents recorded could not be considered representative of any aspect of task accomplishment.

(7) Officer team ("after-action") reports. Test Directorate officer observers were clustered into five teams--one team for each type of unit being observed. These officer teams each prepared an after-action report detailing their reactions to the REFORGER experience and enumerating their findings and conclusions. The after-action reports were used in the preparation of Part IV of this report.

(8) Deployability data. NCO data collectors obtained information concerning deployables and nondeployables from company records and ramp manifests. This weekly data collection was begun six weeks before the field training exercise began. Each NCO data collector made appointments in his or her assigned units with as many nondeployables and their supervisors that he or she could. These interviews were conducted in accordance with the interview schedules previously described.

(9) Follow-up interviews with enlisted women. Approximately two months after REFORGER was over, 40 enlisted women (20 high performers and 20 low performers) were interviewed. The women were interviewed at Ft. Riley by two ARI research scientists and an officer research and development coordinator from ARI. After completing three self-description inventories, each woman was interviewed using the interview schedule previously described. The purpose of the interview was to determine what factors in the woman's experience, both Army experience and pre-Army experience, might be related to her level of performance. The results of these interviews are reported separately in Part V of this report.

(10) Follow-up interviews with NCO data collectors. With a few exceptions, the NCO data collectors were interviewed after their return from Europe<sup>5</sup>. These interviews were conducted at Headquarters, ARI by ARI scientists. The debriefings investigated the NCO data collectors' overall impressions of female performance during REFORGER and obtained their recommendations for improving data quality in future field research. The interview schedule used in these interviews was previously described, and the results of the interviews are presented in Part V.

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<sup>5</sup>The exceptions were three NCO data collectors who were debriefed in Europe by ARI research scientists the day the field training exercise ended.

### PART III

#### QUANTITATIVE ANALYSES: RESULTS AND DISCUSSION

Quantitative analyses will be presented and discussed in four sections: performance data, utilization of enlisted men (EM) and enlisted women (EW), deployability data, and questionnaire data on background characteristics and attitudes of EM and EW. Most bulk tabular material will be relegated to the appendices, so that this part can center upon discussion of results, with only selected tables and excerpts from the tables for illustration.

##### 1. PERFORMANCE DATA

Types of performance data. Three major sources of performance data were: group event ratings, obtained by Test Directorate officer evaluators for all-male groups and groups with one or more females; individual event ratings, obtained also by Test Directorate evaluators on Soldier's Manual tasks performed by individual women and by individual men who were as comparable to the women as possible; and daily ratings of overall performance by supervisors, obtained by NCO data collectors for all women and members of the male cohort. Performance from the three data sources was examined in various ways: as a whole for men versus women; as a whole, by time periods during the field exercise (first three, middle three, and final four days); as a comparison between companies that experienced stress versus those companies with little stress; as a comparison between tasks common to all companies (tactical and sustenance) versus MOS-related tasks unique to the mission of the particular company.

Definitions. For clarity, definitions of several terms previously discussed in Part II of this report are briefly repeated here.

Type of unit refers to the five types of companies: maintenance, medical, military police, signal, and supply and transportation.

Two important factors in comparisons of performance data were stress and type of task. Those companies that had experienced one or more moves during the field training exercise were defined as "high stress" units, while those companies which did not move at all were defined as "low stress" units. Tasks were defined as "common" or "unique." Common tasks involved sustenance and tactical jobs performed by all types of units, and unique tasks involved MOS-related jobs.

Gender comparisons were made for group event ratings, individual event ratings, and daily performance ratings. Group comparisons involved the following:

"male" - groups containing only men

"mixed" - the aggregate of the very few all-female groups plus the mixed male/female groups

For individual event ratings, members of the female cohort were compared with males who had been rated on the same tasks as the females. General comparisons of daily performance ratings were made on the male cohort and the female cohort.

"Adjusted" ratings were used in analyses of performance data. As described in Part II, a "conditions" score was recorded for each group event rating, and an "environment" score was recorded for each individual event rating. The raw score rating was added to the "conditions" score (for group events) or the "environment" score (for individual events) to obtain an "adjusted" rating. When the data were analyzed, the "adjusted" ratings were used. The purpose of this procedure was to correct the original ratings in such a manner as to arrive at an estimate of the "true" performance under optimal conditions.

Time periods used in the analyses were defined as follows:

Pre-FTX - Ratings made prior to 13 September.

Beginning-FTX - Ratings made during the first part of the FTX on 13-15 September.

Middle-FTX - Ratings made during the middle part of the FTX on 16-18 September.

End-FTX - Ratings made during the final part of the FTX on 19-22 September.

a. Group Event Ratings.

Table III-1 shows that the average group event rating was 4.9 on the seven-point rating scale, for the total of 820 observations. Across all units, all-male groups averaged 4.9 and groups with one or more females averaged 5.0, which was essentially no difference. The total number of observations, 220 for male groups and 600 for mixed groups, reflects an emphasis on observing female performance.

The breakout by time period for all units in Table III-1 shows no difference between male and mixed groups for the beginning period (average of 4.6 for both) or for the end period (5.0 for both). For the middle period, the mixed groups were rated higher than the male groups (5.5 versus 5.1), but this difference was not statistically significant.

Table III-1 also presents averages by the five types of units, with overall average ratings somewhat higher for the mixed groups for maintenance, signal, and supply and transportation. In medical and military police units, overall averages were slightly higher for the male groups. Among the five types of units, male versus mixed averages did not show consistent patterns across the three time periods. Only for supply and transportation, in the middle time period and for the total time periods, was the difference between male and mixed groups statistically significant. When all unit types were combined, no statistically significant differences occurred between all-male and mixed groups.

Table III-1

GROUP EVENT RATINGS  
AVERAGE<sup>a</sup> BY TIME PERIOD FOR EACH TYPE OF UNIT

Type of Unit		Beginning 3 Days		Middle 3 Days		End 4 Days		Total	
		N	Average	N	Average	N	Average	N	Average
Maintenance	Male	12	4.2	12	5.2	4	4.3	28	4.6
	Mix	47	4.7	36	5.2	69	4.9	152	4.9
	Tot	59	4.6	48	5.2	73	4.9	180	4.9
Medical	Male	30	4.7	11	5.4	33	5.0	74	4.9
	Mix	48	4.7	13	4.8	61	4.6	122	4.7
	Tot	78	4.7	24	5.0	94	4.7	196	4.8
Mil Police	Male	5	4.8	14	5.0	11	5.5	30	5.2
	Mix	24	4.5	15	5.3	24	5.3	63	5.0
	Tot	29	4.6	29	5.2	35	5.3	93	5.1
Signal	Male	12	4.3	6	5.7	6	5.8	24	5.0
	Mix	56	4.2	38	6.3	45	5.4	139	5.2
	Tot	68	4.2	44	6.2	51	5.5	162	5.2
Supply & Trans.	Male	26	4.8	14	4.5	24	4.8	64	4.7
	Mix	52	5.1	31	5.1	41	4.9	124	5.0
	Tot	78	5.0	45	4.9	65	4.9	188	4.9
All Units	Male	85	4.6	57	5.1	78	5.0	220	4.9
	Mix	227	4.6	133	5.5	240	5.0	600	5.0
	Tot	312	4.6	190	5.4	318	5.0	820	4.9

Note. Averages are based upon adjusted ratings (performance ratings plus conditions score).

<sup>a</sup>In this table and throughout the report, average is arithmetic mean.

\*Statistically significant at the 5% level.

When the companies were separated into those that experienced stress (one or more moves during the exercise) and those with little or no stress (no moves), their average ratings could be tabulated as shown in the top half of Table III-2 by time periods. It can be noted that roughly one-third of the observations were made in the high stress companies and two-thirds in the low stress companies. The resultant small numbers of observations upon which some of the averages were based should caution against attaching undue importance to the results in these cases. In the high stress group, overall average performance was higher for the mixed groups (5.3) than for the male (5.0), but this finding was not statistically significant. In the beginning time period the mixed groups were rated lower than the male, but in the middle and end periods they were rated higher. The middle time period difference was statistically significant. For the low stress companies, average performance ratings on group events were identical or very close for all-male and mixed groups. None of the differences was significant. Tables B-1 and B-2 in Appendix B present the stress data further broken down by type of unit; the number of ratings upon which the averages in these tables were based was very small.

Table III-2

**GROUP EVENT RATINGS:**  
**AVERAGES FOR MALE AND MIXED GROUPS BY HIGH STRESS VS LOW STRESS COMPANIES**  
**AND BY COMMON TASKS VS UNIQUE TASKS FOR EACH TIME PERIOD**

Group	Pre-FTX		Beginning 3 Days		Middle 3 Days		End 4 Days		Total	
	N	Avg	N	Avg	N	Avg	N	Avg	N	Avg
<b>High Stress</b>										
Male	-	-	32	4.8	24	5.2	34	5.1	90	5.0
Mixed	-	-	68	4.4	44	*6.3	62	5.5	174	5.3
<b>Low Stress</b>										
Male	-	-	53	4.5	33	5.0	44	5.0	130	4.8
Female	-	-	159	4.7	89	5.1	178	4.8	426	4.8
<b>Common Tasks</b>										
Male	3	3.5	38	4.4	22	4.9	17	4.2	80	4.5
Mixed	22	4.7	128	4.5	74	5.1	98	4.7	322	4.7
<b>Unique Tasks</b>										
Male	32	5.0	47	4.8	35	5.1	61	5.2	175	5.1
Mixed	84	5.2	99	4.8	59	*5.9	142	5.1	384	5.2

**Note.** Averages are based upon adjusted ratings (performance rating plus conditions score).

\* Statistically significant at the 5% level

In the bottom half of Table III-2 group event ratings are broken out according to type of task: common (sustenance and tactical) and unique (MOS-related). Overall averages reveal slight but mostly not statistically significant superiority for the mixed groups. On unique tasks, mixed groups averaged higher in the middle time period. This was the only difference which was statistically significant. On common tasks, mixed groups averaged higher in the end time period. Other differences were negligible. Tables B-3 and B-4 in Appendix B present the same data further broken down by type of unit; at this level all numbers of observations were small and only one difference had statistical significance.

Averages presented thus far on group event ratings have been based on observations aggregated for different groups, different evaluators, and different events, without regard to continuity of identity across time periods. In Table III-3, results are presented for male and mixed groups which were equated for the same groups, same events, and same raters, for two or more time periods. For example, in the total sample, ratings were available for 13 pairs of groups, matched for events and raters, for the beginning and end time periods. Ratings were available for 12 pairs of groups with the same events and raters for the beginning and middle periods. The latter set of group pairs represented the only one for which comparisons attained statistical significance. The statistically significant differences for the set show that mixed groups performed better than male groups in the beginning and middle time periods and that both male and mixed groups performed better in the middle time period than they did in the beginning.

For the middle and end periods, eight pairs of groups in the total sample could be matched for events and raters. But for all three time periods, only six pairs of groups could be so matched. Note that when the factor of stress was taken into account (see the lower half of Table III-3), the number of group pairs which could be equated for events, raters, and time periods diminished so drastically that conclusions could not be drawn.

In summary, Tables III-1, III-2, and III-3 contain six statistically significant differences between male and mixed groups. In all six of these comparisons, the averages for mixed groups were significantly higher than the averages for male groups and four of the differences occurred in the middle time period.

Table III-3

GROUP EVENT RATINGS FOR TOTAL & HIGH STRESS COMPANIES:  
AVERAGES FOR SAME MALE AND MIXED GROUPS WITH SAME RATERS ON  
SAME EVENTS IN DIFFERENT TIME PERIODS

Same Groups, Same Events, Same Raters in Time Periods:	N	Type of Group	Time Period		
			Begin	Middle	End
<u>Total Sample</u>					
Begin & End	13	Male	4.7	—	4.9
		Mix	4.8	—	4.8
Begin & Middle	12	Male	*{4.5	*{5.4	—
		Mix	*{5.0	*{6.0}	—
Middle & End	8	Male	—	4.9	5.0
		Mix	—	5.6	5.1
All Time Periods	6	Male	5.2	5.3	5.3
		Mix	5.3	5.8	5.6
<u>High Stress Only</u>					
Begin & End	3	Male	5.3	—	4.7
		Mix	5.2	—	4.7
Begin & Middle	1	Male	6.0	6.0	—
		Mix	6.0	6.0	—
Middle & End	1	Male	—	3.0	3.0
		Mix	—	6.0	3.0
All Time Periods	0	Male	—	—	—
		Mix	—	—	—

Note: Averages are based upon adjusted ratings (performance rating plus conditions score).

\* Statistically significant at the 5% level



b. Individual Event Ratings.

Average individual event ratings for matched<sup>1</sup> enlisted men and women in the five types of units over the time periods are given in Table B-5 in Appendix B. A summary of the results is shown below.

Enlisted Personnel	Time Period				
	Pre-FTX	Begin	Middle	End	Total
EM	5.1	5.0	5.6	5.1	5.2
EW	4.8	5.0	5.8	5.1	5.2

This summary reveals no striking overall differences between male and female performance on individual events over time. During the pre-exercise period, the male average was higher, and during the beginning period, the male and female averages were the same. During the middle period, women were rated slightly higher than men, while the averages for the two groups were identical during the end period. These minor differences did not affect overall performance, as the average individual event ratings were the same (5.2 for a total of 403 observations) for matched men and women in all five types of companies and over all time periods.

Table B-6 in Appendix B contains the average individual event ratings for matched men and women in high stress companies for all time periods and for the five types of units. Table B-7 in Appendix B reports averages for the low stress companies. As can be seen in the summary below, although women tended to receive lower ratings than men in the earlier time periods, in general there were only minor discrepancies between the male and female averages for both the high stress and low stress companies. The total male average (5.3 for 144 observations) slightly exceeded the total female average (5.2 for 137 observations) in the high stress companies. In the low stress companies, the total male and female averages were identical (5.1 based on 259 observations for men and 266 observations for women). Thus, even when the stress factor was taken into account, only one significant male-female difference can be seen in Table B-6 and B-7 in Appendix B, and this difference was not based on all units.

Another factor which might have been related to differential performance of men and women was type of task (common and unique). Table B-8 in Appendix B shows the average individual performance ratings of matched men and women on common tasks in the five types of units over time. Table B-9 in Appendix B contains the averages for unique tasks. A summary of the results for high and low stress companies and for common and unique tasks is given below.

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<sup>1</sup>For every woman who was given an individual event rating, an attempt was made to observe a man doing the same task.

Enlisted Personnel	High Stress					Low Stress				
	Pre	Begin	Middle	End	Total	Pre	Begin	Middle	End	Total
EM	5.3	5.1	5.6	5.2	5.3	5.0	5.0	5.6	5.0	5.1
EW	5.0	4.8	5.6	5.4	5.2	4.7	5.1	5.9	5.0	5.1

Enlisted Personnel	Common Tasks					Unique Tasks				
	Pre	Begin	Middle	End	Total	Pre	Begin	Middle	End	Total
EM	5.2	4.9	5.6	5.1	5.1	4.9	5.1	5.7	5.1	5.2
EW	4.8	4.9	5.7	5.0	5.0	4.9	5.2	5.9	5.5	5.4

\*Statistically significant at the 5% level.

The only statistically significant difference in these data was the difference between the female average (4.8) and the male average (5.2) on common tasks during the pre-exercise period. For both men and women and for both common and unique tasks, there was a tendency for performance to improve through the middle period and then to drop during the end period. Although the total male average (5.1 for 267 observations) was slightly higher than the total female average (5.0 for 267 observations) for common tasks and the total female average (5.4 for 136 observations) was somewhat higher than the total male average (5.2 for 136 observations) for unique tasks, neither of these differences was statistically significant. Accordingly, it can be concluded that no consistent male-female performance differences were found when individual events were divided into common and unique tasks.

Individual events can also be classified by clustering those MOS tasks which are similar to each other--e.g., clerical jobs, auto repair jobs. Of 13 categories identified, three (clerical, cook, and supply) were found in more than one type of unit, while the other 10 were found in only one type of unit. Table B-10 in Appendix B shows the average individual performance ratings for this classification of tasks for matched men and women in each of the time periods. The two cases in which significant differences were obtained are shown below.

Enlisted Personnel	Supply	Telecommunication
	(3 types of units)	(1 unit)
EM	5.0	4.7
EW	5.4	4.3

The male-female difference for the supply-type jobs, based on 52 matched pairs, was statistically significant at the 5% level. The difference for the telecommunication-type jobs, based on 63 matched pairs, was also statistically significant at the 5% level. None of the other 11 job categories had statistically significant male-female differences on individual event ratings. Although there was a sizeable difference between the male average (5.0) and the female average (4.2) for power equipment jobs, the averages were based on only seven matched pairs and thus did not reach statistical significance.

The results reported above have shown that no consistent pattern of male-female differences emerged from the analyses of the individual event ratings. Whether the ratings were considered from the standpoint of overall results or whether they were broken out by level of stress, by common and unique tasks, or by type of MOS jobs, the results were the same: no regular pattern of male-female differences. A tendency did appear for both men and women to receive somewhat lower ratings during the earlier time periods. Both groups also received their highest ratings during the middle period of the exercise. This latter finding may be due to the fact that environment scores were highest for the middle period (during which inclement weather occurred), thus increasing the middle period ratings. It should also be noted that although a few statistically significant differences were found, these differences were not unidirectional in nature. Of the four significant differences found between men and women, two were in the direction of higher male averages and two were in the direction of higher female averages. Considering the number of statistical tests that were conducted, some of these significant values might have occurred by chance.

#### c. Daily Performance Ratings.

Overall performance ratings of members of the male and female cohorts were obtained on an approximately daily basis from section chiefs and other supervisors by Test Directorate NCO data collectors. Ratings were made on a scale of 1 (inferior performance) to 7 (superior performance)<sup>2</sup> and recorded on Daily Record of Work Availability and Performance, Schedule 4, forms. Table III-4 shows the average performance ratings of matched men and women during the pre-exercise time period, the three periods of the field exercise, and the total time period (pre-exercise through end-exercise). Averages were based on the average rating received by each individual rated during a given time period. Table III-4 shows no difference in average daily performance ratings for men and women in any of the time periods. In addition, performance ratings of both men and women improved over time.

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<sup>2</sup>The scale appears in Part II of this report.

Table III-5 shows the average performance ratings of a subset of the total sample of men and women presented in Table III-4. This subset consists of 155 females and their matching males from the male cohort who had at least one rating in each of the three time periods. The performance ratings in Table III-5 are presented separately for soldiers in high stress companies, low stress companies, and all companies combined.

The results of an analysis of variance statistical test of the daily performance data based on the 155 matched pairs are presented in Table III-6. The results of the analysis show statistical significance only for time period and for the three-way interaction of time period, gender, and stress. Statistical significance of time period indicates that time itself had an effect upon performance: the scores for the combined sample of men and women improve over time. Statistical significance of the time period, gender, and stress interaction is very likely due to the relatively low score obtained by women in the high stress companies during the first time period.

No other results in the daily performance data for the 155 matched pairs were statistically significant. Although, as can be seen in Table III-5, men and women in the high stress companies tended to have higher scores than men and women in the low stress companies, "stress" by itself did not affect the daily performance ratings. Nor did gender, or the combinations of gender and time, gender and stress, or stress and time affect the daily performance ratings.

d. Correlation of Daily Performance Ratings and Individual Event Ratings.

The daily performance ratings and the individual event ratings were analyzed to identify individuals who received both types of ratings for each time period of the field training exercise or the same type of rating for different time periods.

Thus, six sets of data resulted:

Daily Performance - Beginning (of exercise)

Daily Performance - Middle

Daily Performance - End

Individual Event - Beginning

Individual Event - Middle

Individual Event - End

Table III-4

AVERAGE DAILY PERFORMANCE RATINGS BY SUPERVISORS  
FOR REGULAR DUTY HOURS

Group	Time Period				Total
	Pre-FTX	Begin	Middle	End	
EM					
Average	5.7	5.9	5.9	6.0	5.9
Number of Ratings	179	191	193	189	752
EW					
Average	5.7	5.9	5.9	6.0	5.9
Number of Ratings	168	186	182	181	717

Note: Average ratings for 202 women and 200 men in matched pair data set, based on all data available, regardless of continuity through all time periods.

Table III-5

AVERAGE DAILY PERFORMANCE RATINGS OF ALL EM AND EW IN MATCHED PAIRS  
FOR HIGH STRESS, LOW STRESS, AND ALL COMPANIES BY TIME PERIOD

Members of Matched pairs		Time Period			
		Begin	Middle	End	Total
High Stress					
EM	(N=47)	6.1	6.2	6.1	6.1
EW	(N=47)	5.7	5.9	6.1	5.9
Low Stress					
EM	(N=108)	5.8	5.8	6.0	5.9
EW	(N=108)	5.9	5.8	6.0	5.9
Total					
EM	(N=155)	5.9	6.0	6.0	6.0
EW	(N=155)	5.8	5.8	6.0	5.9

Table III-6

## ANALYSIS OF VARIANCE FOR OF PERFORMANCE RATINGS

Source of Variance	Degree of Freedom	Mean Square	F-Test
Between subjects	<u>309</u>		
A (Stress)	1	513.23	2.28
B (Gender)	1	220.59	-
AB	1	325.94	1.45
Subj. within groups	306	224.96	-
Within subjects	<u>620</u>		
C (Time Period)	2	163.61	9.51**
AC	2	30.21	1.76
BC	2	30.91	1.80
ABC	2	85.82	4.99**
C x subj within groups	612	17.20	-

\*\* Statistically significant at the 1% level.

The correlations among the six sets of data for the total sample are reported in Table III-7. Tables containing correlations for the male and female subsamples can be found in Appendix B (Tables B-11 and B-12).

As can be seen in Table III-7, all within-instrument correlations were significant at the .01 level. Correlations for the daily performance ratings among the three time periods were .79, .72, .85. Correlations for the individual event ratings among the same time periods were .49, .57, and .72. Daily performance ratings were overall ratings obtained from the soldier's usual supervisor, while the individual event ratings were made on specific tasks which could vary from observation to observation and which were judged by different people (officer evaluators of the Test Directorate). Hence, it would be expected that the daily performance ratings would have had higher correlations among time periods than would the individual event ratings.

Table III-7 also reveals that correlations between the two instruments were significant for the beginning and end periods of the FTX but not for the middle period. Of the nine cross-instrument cross-time correlations, all but two were significant. This result provided evidence for the validity of the ratings obtained with the instruments. Although ratings obtained from the two instruments varied in type of rating, rater, and time of rating, most of the correlations were significant. Accordingly, greater confidence can be placed in the data collected by both methods.

#### e. Observational Performance Data

One of the reasons for the REF WAC research stemmed from the concern that female performance in the field would deteriorate over lengthy periods of time. Some individuals with experience in both combat and extended field conditions thought that longer periods of time would adversely affect female performance. Accordingly, the averages for males and "others" (females, and mixed groups) contained in all of the preceding tables were inspected for changes in performance level from the beginning period to the end period of the field training exercise for the three types of observed performance ratings (group event ratings, individual event ratings, and daily performance ratings) by level of stress (high, low) and type of task (common, unique). As noted previously, averages for the middle period were generally highest of all the time periods. Thus, it was decided to contrast the beginning with the end period since this comparison afforded the best opportunity to ascertain whether there was any decrement in performance due to stress or fatigue from being in the field for an extended period of time.

Table III-7

INTERCORRELATIONS OF DAILY PERFORMANCE AND ADJUSTED INDIVIDUAL  
EVENT RATINGS ACROSS TIME PERIODS FOR TOTAL SAMPLE

	(1)	(2)	(3)	(4)	(5)	(6)
(1) Daily Performance Beginning	1.00	.79** (360)	.72** (357)	.25** (98)	.29* (64)	.26** (103)
(2) Daily Performance Middle		1.00	.85** (361)	.29** (95)	.15 (67)	.20* (101)
(3) Daily Performance End			(100)	.27** (94)	.11 (64)	.23** (102)
(4) Individual Event Beginning				1.00	.49** (73)	.57** (97)
(5) Individual Event Middle					1.00	.72** (78)
(6) Individual Event End						1.00

Note: Number of cases on which correlation coefficient is based is shown in parentheses below coefficient.

\* Statistically significant at the 5% level.

\*\* Statistically significant at the 1% level.



Of 20 comparisons between beginning and end performance ratings, 15 showed a performance increase, four stayed the same, and one showed a performance decrement. Male performance averages increased six times and stayed the same four times, for a total gain of 1.5 points from the first to the last time period. Female averages increased nine times and decreased once, for a net gain of 3.0 points. Overall, both male and female performance increased from the beginning to the end periods of the exercise, although female performance showed a greater average increase (statistical significance was not computed). Hence, it appears entirely possible that MAX WAC findings of no difference in unit performance due to content of women would have remained the same for a 10-day, instead of a three-day, field exercise.

When all the observed REF WAC performance data (group event ratings, individual event ratings, and daily performance ratings) were viewed in toto, few statistically significant differences were found between males and "others" (females, or mixed groups). When all differences were considered regardless of statistical significance, an interesting pattern was found in the data.

For group event ratings and individual event ratings, a total of 32 comparisons were made between males and "others" for each of the three time periods and the total period, separately for high stress and low stress companies and for common and unique tasks. The comparisons were made on data which was collapsed across type of unit. Eight comparisons were made between the male and female cohorts on daily performance ratings in the three time periods and the total period, separately for high stress and low stress companies. Of the total of 40 comparisons, there were 20 higher female/mixed averages, 10 higher male averages, and 10 instances in which the male and female/mixed averages were the same. Thus, in 75% of the comparisons (30 out of 40), the female or mixed averages exceeded or were the same as the male averages. Although these differences were not all statistically significant, this result provided clear evidence that during the field training exercise, the performance of females/mixed groups was not inferior to that of males.

f. Questionnaire Results Relating to Performance Data.

On the officer and NCO posttest, the respondents were asked to compare the general performance of male and female soldiers during REFORGER. The responses to this question (item 40, officer and NCO posttests) are presented in Table III-8.

Table III-8

"IN GENERAL, HOW DID THE PERFORMANCE OF WOMEN  
SOLDIERS COMPARE WITH THE PERFORMANCE  
OF MEN SOLDIERS DURING REFORGER?"  
(IN %)

Response Alternatives	POSTTEST ONLY	
	Off (N=145)	NCO (N=470)
Men performed better	34	42
The same	56	33
Women performed better	2	4
No opportunity to observe women	8	20

Note. Here and throughout this report each percentage figure has been rounded and, therefore, the sum of the percentages need not necessarily total to 100.

More than half of the officers and about a third of the NCO's responded that there was no difference in overall male and female performance. However, substantial minorities of both groups (34% of the officers, and 42% of the NCO's) believed that men performed better. Only a few (2% of the officers and 4% of NCO's) believed that women performed better.

Table III-9 examines responses to items 41-43 (which asked officers and NCO's to compare male and female performance during three REFORGER time periods), and these results revealed a similar pattern. Again, approximately half of the officers and a third of the NCO's felt there was no difference in male and female performance during REFORGER, while a quarter to a third of the respondents believed women had done worse. When the NCO responses were broken down by the number of times the respondents had worked with women (Table III-10), the general pattern emerged that increased work with women resulted in lower evaluations of female performance as compared to evaluations of male performance.

In the officer, NCO, and enlisted posttests, respondents were asked how well they thought most enlisted men and enlisted women did their unit defense and housekeeping (tactical, sustenance) jobs and their other (MOS-related) jobs during REFORGER. Responses to these items are shown in Table B-13 and B-14 in Appendix B. As a whole, officers, NCO's and EM

(but not EW) gave higher ratings to EM than to EW. For example, 93% of the officers, 83% of the NCO's and 78% of the EM thought that men did good-excellent MOS-related jobs compared to 70%, 50%, and 35% of the officers, NCO's and EM, respectively, who thought EW did good-excellent jobs.

Table III-9

"COMPARE THE PERFORMANCE OF MEN AND  
WOMEN SOLDIERS DURING REFORGER"  
(IN %)

Response Alternatives	Officers			NCO's		
	First 3 days (N = 147)	Mid 5 days (N = 146)	Last 3 days (N = 149)	First 3 days (N = 466)	Mid 5 days (N = 467)	Last 3 days (N = 460)
Performance of women deteriorated more	22	36	28	28	36	33
No difference	56	44	47	36	30	31
Performance of men deteriorated more	2	3	9	7	9	8
Don't know	19	16	16	29	25	27

These questionnaire data, then, do not wholly support the performance data which were obtained from officers and supervisors who observed the soldiers' performance in the field. Note that the questionnaire data involved opinions of performance while the other ratings were based on observations of performance. Hence the attitudinal component was probably a stronger factor in questionnaire responses. The explanation of this discrepancy is not immediately apparent. It may be that what is operating here is the phenomenon observed in social psychology investigations, in which members of a minority are often evaluated more favorably as individuals than is the minority group as a whole. Therefore, if the number of women in a group goes beyond a certain threshold, then a group rather than individuals are perceived, and attitudes become more negative.

Table III-10

"COMPARE THE PERFORMANCE DETERIORATION OF MEN AND  
WOMEN SOLDIERS DURING REFORGER"

- NCO RESPONSES BY FREQUENCY OF WORK  
WITH ENLISTED WOMEN SOLDIERS DURING  
REFORGER 77-  
(IN %)

Frequency of work	Response Alternatives	First 3 days	Mid 5 days	Last 3 days
Never	<u>Deterioration:</u>	(N = 101)	(N = 101)	(N = 97)
	. Women more	14	19	16
	. No difference	19	15	14
	. Men more	6	7	4
	. Don't know	61	60	66
1-8 Times	<u>Deterioration:</u>	(N = 79)	N = 79)	(N = 79)
	. Women more	23	34	30
	. No difference	34	22	24
	. Men more	6	11	13
	. Don't know	37	33	33
Everyday or Almost	<u>Deterioration:</u>	(N = 282)	(N = 283)	(N = 280)
	. Women more	36	42	39
	. No difference	42	38	40
	. Men more	7	9	9
	. Don't know	15	11	12

g. Work Availability.

A record was made (on Daily Record of Work Availability and Performance, Schedule 4) of the amount of time and the reasons members of the male and female cohorts were not available for regular duty. The frequencies of entries and the average number of hours per day for assigned hours and hours of nonavailability can be found in Table B-15 in Appendix B and are summarized below. None of the differences between men and women was statistically significant.

Availability/ Nonavailability	Total Number <sup>a</sup>		Average Daily Hours	
	EM	EW	EM	EW
Assigned Hours	2130	2152	12.0	11.2
Reasons for Nonavailability:				
Accident	0	1	0	<.1
AWOL	3	0	<.1	0
Disciplinary action	2	21	<.1	<.1
Sick call	7	33	<.1	.2
Sick in quarters	7	47	<.1	.3
Special duty	75	137	.4	.6
Other	38	64	.2	.3

<sup>a</sup> Of assigned hours or incidents of nonavailability

As can be seen in the summary, only one accident was reported (for a woman), and three cases of AWOL were recorded (for men). The summary also shows 21 instances of disciplinary action for women compared to two for men. Inspection of the data revealed that all but two of the female instances involved members of the same company. Apparently these 19 disciplinary actions were the result of a single incident in which the majority of a truckload of women patronized a guesthouse when they should have returned directly to their unit's area of operation after showering.

The summary also shows that the average number of hours per day women spent on sick call exceeded the average number of hours recorded for men (.19 hours for women; .03 for men) and that women were sick in quarters more frequently than men, averaging .28 hours lost per day for this reason compared to .06 hours for men. Although these differences were not statistically significant, the direction of the differences was supported by the statistically significant results found in the questionnaire data, which are reported in Table B-16 of Appendix B. Questionnaire data collected both before and after REFORGER showed that women reported going on sick call more frequently during the preceding month than men reported for the same period of time (45% of EW and 24% of EM went on sick call one or more times). A preliminary inspection of the Daily Record data indicated that men and women in high stress companies did not differ in amount of sick call time. An analysis of the effect of stress on work availability is being conducted.

Women also were placed on special duty more frequently than men. The female average was .58 hours per day compared to the male average of .35 hours per day. This male-female difference appeared to be due to women being assigned more hours of special duty in the maintenance, medical, and supply and transportation units. No male-female difference was found for signal units, and men in military police units averaged more time per day on special duty than did the women (.20 hours for men; .12 hours for women). Inspection of the data suggests that some women were frequently assigned to mess hall duty and to guard duty. Men seemed to be much less frequently assigned to such duty. Further analysis should be conducted to determine why the total special duty hours for women were higher than those for men.

The amount of time reported in the "other" category appears to be high for both men and women. The average daily hours for women (.3) exceeded that for men (.2). Preliminary inspection of the data indicated that a substantial number of the "other" hours were classified as "compensatory time," which in turn seemed to be related to special duty hours spent on guard duty. Further analysis should be conducted to identify the reasons for the large number of instances falling into the "other" category. While the self-report data from the questionnaire and the information obtained from supervisors concerning the amount of sick call taken during REFORGER validate each other, results from another questionnaire item did not substantiate the findings of the first two types of data. Table B-17 in Appendix B contains the responses to the item "Who went on sick call more often during REFORGER 77?" The answers of the male and female respondents are summarized below.

Enlisted Personnel	Men went more often	Women went more often	There was no difference
EM (% responding)	13	30	57
EW (% responding)	38	10	53

Although the self-reports and the supervisors' reports clearly demonstrated that women went on sick call more often than men, the majority of both the enlisted male and female questionnaire respondents said there was no difference. Of those who reported a difference, men felt that women went on sick call more frequently and women felt that men went on sick call more frequently.

The summary of work availability and nonavailability presented above shows that women worked fewer hours than men. The average number of assigned hours daily was 12.0 for men and 11.2 for women. Even though women averaged more special duty hours (.6) than men (.4), this difference did not compensate for the difference in assigned hours. The data obtained from the questionnaire item relating to amount of work partially supported the results obtained from the supervisors' reports. A summary of the responses to the item "During REFORGER 77, who worked the most hours?" is presented below.

Enlisted Personnel	Men worked more	Women worked more	There was no difference
EM (% responding)	63	3	34
EW (% responding)	18	11	72

The majority of the enlisted male respondents (63%) perceived, correctly, that men worked more hours during REFORGER than women did, although about a third of them believed there was no difference in hours worked. Only a very small percentage of men (3%) believed women worked more. A high percentage of enlisted female respondents (72%), on the other hand, reported that there was no difference in hours worked, with only 18% of women believing that men worked more and 11% that women worked more. For both male and female respondents, then, the percentages responding that women worked more were smaller than the percentages responding that men worked more or that there was no difference.

Hence, data obtained from the male respondents corroborate the supervisors' reports of more work for men. Data from females did not reflect either the situation perceived by the enlisted men or reported by the supervisors.

## 2. UTILIZATION OF ENLISTED MEN AND ENLISTED WOMEN

### a. Judgments of MOS as to Difficulty for Average Female because of Physical Requirements.

The 21 MTOE's (organizational tables) in the five types of units evaluated under REF WAC 77 contained 98 different MOS. Judgments were compiled from two sources as to the difficulty for the average woman of performing tasks in the MOS because of the physical requirements of the job: (1) the Test directorate officer evaluators, and (2) the ARI questionnaire supplement administered to supervisors immediately following the field exercise. The ARI supplement contained nine MOS which were not assessed by the Test Directorate. Also, there were nine MOS evaluated by the Test Directorate which did not appear on the ARI questionnaire supplement.

REF WAC Test Directorate assessments of MOS difficulty were based on the individual and group rating modules judged by the five officer observer teams, the judgments of the team members, and comments from supervisors of units with female content. Assessments of 1, 2, or 3 were given on the following basis: 1 indicates that all tasks in the MOS can be performed by women in a field environment; 2 indicates that most but not all tasks of the MOS can be performed by women in a field environment; 3 indicates that few of the tasks are within the physical capability of women. Ratings of 1 were given to 45 MOS; ratings of 2 were given to 34 MOS; only one MOS (telephone installer/lineman, 36C) was rated 3. In every instance in which it was decided that women could not perform a task, the reason was judged by Test Directorate personnel to be lack of upper torso strength. A complete listing of all MOS is given in Table B-18 in Appendix B, with MOS designation and title, followed by the Test Directorate assessment. (Tables B-19 to B-23 in Appendix B contain data from the five types of companies upon which Table B-18 is based.)

ARI posttest questionnaires contained a supplement for supervisors which was filled out by a total of 167 officers and 393 NCO's in the five different types of units. There were 21 different forms of the supplement representing 21 different MTOE's and a total of 89 different MOS. (See Appendix A, pages 105-114, for a sample of the supplemental questionnaire forms.) Each officer or NCO responded only to the MTOE specific to his or her company, or companies if the officer was at battalion level. Page 8 of the questionnaire asked the respondent to check any MOS presenting problems for women because of the physical requirements of the job. In Table B-18 in Appendix B, responses are summarized for each MOS for both officers and NCO's. The column headed N indicates the total number of officers or NCO's who had a chance to evaluate each MOS in a given MTOE. The percentage in the next column is the percentage of the total number who checked the MOS.

A comparison of officer and NCO responses, summarized from Table B-18 in Appendix B, is presented in Table III-11. The number of officers and NCO's checking each MOS is represented by the rows and columns of this table. Three intervals, corresponding essentially to the lower, middle, and upper one-third of the percentage range, are used. Each MOS is represented in one of the cells whose meaning is defined by the row and column headings of the table. Thus one sees that 61 MOS were checked by 33% or fewer of the officers and NCO's. Similarly, 17 MOS were checked by 34% to 66% of both the officers and the NCO's while only one MOS was checked by both 33% or less of the officers and from 34% to 66% of the NCO's. Thus, the categorization of MOS that places them in the diagonal cells, those with 61, 17 and five MOS's respectively, represent agreement (within the broad intervals used in the table) between officers and NCO's. The six MOS which fall in the off diagonal cells of the table represent the only disagreements shown in this table.



Table III-11

MOS CHECKED AS PHYSICALLY DEMANDING FOR EW:  
COMPARISON OF OFFICER AND NCO RESPONSES

Percentages of Officers Checking MOS	<u>Percentages of NCO's Checking MOS</u>		
	0-33%	34-66%	67-100%
0-33%	61	1	-
34-66%	4	17	-
67-100%	-	1	5

Since 61 MOS were checked as presenting problems for the average woman by only 0%-33% of both the officers and NCO's, this indicates that most officers and NCO's considered these 61 MOS as physically suitable for women. Examples of MOS seldom or never checked as physically too demanding for the average female are:

71B, Clerk-Typist  
71L, Administrative Specialist  
75B, Unit Clerk

The five MOS that were checked by 66%-100% of both the officers and NCO's reflected that a substantial proportion of both groups felt that these five MOS were physically too demanding for the average women. These MOS are:

36C, Telephone Installer/Lineman  
51A, Construction/Utilities Worker  
63B, Wheel Vehicle Mechanic  
63C, Track Vehicle Mechanic  
63F, Recovery Specialist

In general, it can be concluded that officers agreed with NCO's on the degree to which MOS were judged to present physical problems for the average woman.

Table III-12 below further summarizes the data from Table B-18, comparing the assessments by the Test Directorate of MOS in categories 1, 2, or 3 with the percentages of checks by officers and NCO's on the ARI questionnaire supplement.

Table III-12

COMPARISON OF NUMBER OF MOS ASSESSED BY TEST DIRECTORATE  
AS 1, 2, OR 3 WITH NUMBER CHECKED BY VARYING PERCENTAGES  
OF OFFICERS AND NCO's

Test Dir Category	Percentages Checking MOS					
	Officers			NCO's		
	0-33%	34-66%	67-100%	0-33%	34-66%	67-100%
1	40	5	-	42	3	-
2	15	15	4	16	14	4
3	-	-	1	-	-	1

For both officer and NCO respondents, there was a great deal of agreement with the Test Directorate assessment of which MOS were in category 1. Not many (less than 34%) of the officers thought that most (40 out of 45) of the MOS given a "1" by Test Directorate personnel were physically difficult for women. Similarly, less than 34% of the NCO's checked 42 out of the 45 MOS as physically too difficult for women. There was somewhat less agreement with the Test Directorate assessment of MOS in category 2. Only 19 and 18, respectively, of the 34 MOS given a "2" by the Test Directorate were checked by 34% or more of the officers and NCO's. There was complete agreement on the physical difficulty of the tasks in MOS 36C which was given a rating of "3" by the Test Directorate and checked by 100% of the officers and 86% of the NCO's.

In summary, the two sources generally agreed in judgments of physical difficulties posed by the various MOS, but this agreement was not perfect, probably because of the diversity of situational requirements. It may be noted that several of the MOS which were rated 2 by the Test Directorate, yet were checked a low percentage of the time on the supplement, were in the signal type of unit, e.g., 05C (radio teletype operator); 72C (central office switchboard operator); 72E (telecommunications center specialist); 31S (field general communications security repairman); 31T (field systems communications security repairman). It is possible that Test Directorate evaluators were attending to problems of set-up, whereas questionnaire respondents were addressing normal operation after set-up, which may not be physically difficult.

No differentiation or difficulty by skill level was attempted. For some MOS, it could well be that women might not be able to perform all normal tasks encountered at the entry and intermediate levels but could perform at the 40 and 50 skill levels where more supervisory and administrative duties are involved. It is, of course, highly questionable that good NCO's could be developed from soldiers who could not be assigned to the lower skill levels. However, it would appear that, if some EW could be assigned to these more physically difficult MOS, there should be no problems associated with promotion of these EW as far as MOS-related duties are concerned. Their qualification to accomplish NCO tactical duties poses a separate question.

Observations made by officer evaluators during REFORGER indicated no reason why women could not be trained and assigned in all MOS listed. Teamwork could often accomplish the tasks observed in category 2 MOS that women could not perform alone. In some MOS the physical tasks that are too difficult for a woman could readily be accomplished by either two women or a woman and a man: many of these tasks require such a small percentage of the total work time, commonly in a work situation where assistance is available, that doubling up makes a trivial demand on the total working time.

b. Assignments to MTOE's

The 21 forms of the supplement to the ARI posttest questionnaire assessed two variables. The first variable was appropriateness of women for company MOS and the second was physical difficulty of MOS for the average woman. The second variable was discussed in the preceding section. Information derived from analysis of the physical difficulty variable provided the foundation for analyzing appropriateness. The difficulty variable was used to determine "hard" and "easy" MOS in each MTOE. Those MOS which the respondents rarely or never checked were defined as "least physically demanding" (or "easy") MOS and those checked by a sizeable percentage of the respondents were defined as "most physically demanding" (or "hard") MOS. Some MOS were considered hard or easy in some MTOE's but not in others. Whether or not an MOS was considered hard or easy was relative to the MOS in the MTOE.

Pages 3 - 7 of the supplemental questionnaire assessed the appropriateness of women for company MOS. These pages instructed the respondent to assign a given number of personnel, not exceeding the authorized number for each MOS, across the set of MOS authorized for his or her company. The respondent was asked to make the assignments under five different instructions; under 10%, 35%, and 50% levels of female fill and under 10% and 35% levels of male fill.

Results were analyzed in terms of the hard/easy classification of MOS within each of 20 MTOE's.<sup>3</sup> Tables B-24 to B-43 in Appendix B present, under columns headed "0," the observed average numbers of women and men assigned to hard and to easy MOS for each instruction as well as the differences between average numbers assigned at the 10% and 35% levels to easy MOS, for women, and to hard MOS, for men. (Incremental assignments--differences between 10% and 35% assignments--to hard MOS for women and to easy MOS for men are not shown because women and men were not expected to be overassigned to hard and easy MOS, respectively.) Table B-18 shows, for example, that of nine women ( $q=9$ )<sup>4</sup> to be assigned under the 35% female instruction, the eight officers responding to this instruction assigned numbers of women which averaged out to .1 women (one of the eight officers assigned a woman to MOS 63B;  $1/8$  was rounded to .1) across all respondents to the most demanding MOS in the MTOE. The total number of respondents to the questionnaire is given on the

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<sup>3</sup> One MTOE was dropped from the analysis because of the small number of respondents (N=3).

<sup>4</sup>  $q = 35\%$  of 27 (total authorized strength for MTOE) = 9

left-hand side of the tables. The number of respondents to each instruction may have varied somewhat from the total number and the data reflect this variation. For example, incremental interval assignment data was based on individuals who responded to both the 10% and 35% instructions whereas 10% and 35% assignment data were each based on all individuals responding to each respective instruction. Also presented in Tables B-24 to B-43, in the third column, are the summed authorized strengths of the hard and easy MOS in the MTOE.

The average number of women placed in an MOS position does not by itself supply sufficient information to delineate the policies<sup>5</sup> followed by respondents in making the hypothetical assignments. However, this information can reject the possibility that some policies were used by certain respondents and provide an increased credibility that other alternative policies were utilized. The policies that can in some instances be rejected or supported (but not proved) include: whether women were concentrated in physically easy MOS, whether men were concentrated in physically hard MOS, whether assignments were made in a proportional manner or whether other suitability criteria were used in making assignments. Proportional assignment of women does not necessarily mean gender-free assignment. Some individuals, given no choice but to assign women to their MTOE, may decide that the best approach is to spread the women as evenly as possible throughout the MTOE, thus minimizing the adverse impact which they think the presence of any women might have.

Accordingly, the results from the 20 forms of the supplemental questionnaire were analyzed on the basis of three hypotheses: (1) the "proportionality" hypothesis which states that assignments at any given level of fill will be made in proportion to the number of authorized positions, (2) the "concentration" hypothesis which states the inverse, that men will be overassigned (in the sense of being assigned in greater numbers than would be dictated by a proportionality policy) to traditional male jobs which are most physically demanding and that women will be overassigned to traditional female jobs which are least physically demanding, and (3) the "incremental concentration" hypothesis which states that those who use a concentration assignment policy at the 10% level will also use this concentration assignment policy with respect to the incremental assignment (difference between 35% and 10% level assignments); the hypothetical value against which tests can be made is 2.5 times the number assigned at the 10% level.

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<sup>5</sup>In this context, "policy" is used as in the professional literature relating to "policy-capturing," not in terms of "DA policy."

To test the "proportionality" hypothesis, expected values under the hypothesis were computed: the number of people which one would expect to be assigned to hard and easy MOS was calculated for each level of fill (10%, 35%, 50% female; 10%, 35% male) and for the 10% to 35% incremental intervals. The expected numbers for 10% and 35% levels and the 10%-35% incremental intervals are given in Tables B-24 to B-43 under columns headed  $E_p$  and  $E_{ip}$ , where:

$E_p$  = expected number of assignments at a given fill level  
under the "proportionality" hypothesis,

$E_{ip}$  = expected number of assignments for 10%-35% incremental  
interval under the "proportionality" hypothesis.

For example, the expected number of assigned women in Table B-24 for easy MOS at the 10% level is 10% of 3 (authorized strength) = .3 and the number expected for the incremental difference between the 10% and 35% fill levels for women is 25% of 3 = .75 rounded off to .8. The expected numbers of assignments at each fill level and 10%-35% incremental intervals were then compared to the observed average numbers of assignments by means of statistical tests. If a difference between expected and observed values was not statistically significant, then this provided support for the "proportionality" hypothesis.

The "concentration" hypothesis was tested indirectly in that a hypothetical concentration value could not be computed. This hypothesis was considered supported if the difference between the average number assigned at a given fill level and the expected number under the "proportionality" hypothesis was statistically significant in the specified direction, i.e., overassignment of women to easy MOS or overassignment of men to hard MOS.

The "incremental concentration" hypothesis could best be examined by subtracting the average number assigned under the 10% instruction from that assigned under the 35% instruction and comparing, by means of statistical tests, this incremental difference to the incremental value expected under the "incremental concentration" hypothesis. The expected numbers of assignments for 10%-35% increments under the "incremental concentration" hypothesis are given in Tables B-24 to B-43 under columns headed  $E_{ic}$ , where:

$E_{ic}$  = expected number of assignments for 10%-35% incremental interval  
under the "incremental concentration" hypothesis.

For example, in Table B-24 for easy MOS, the number expected under the "incremental concentration" hypothesis is  $2.5 \times .5$  (average number of women assigned at the 10% level) = 1.25 rounded off to 1.3.

Statistically significant results are indicated by asterisks in Tables B-24 to B-43. Summaries of major elements of the 20 tables are contained in Tables III-13 and III-14. Table III-13 summarizes how many times the observed average number was higher than, lower than, or equal to the expected number to be assigned under the "proportionality" hypothesis for least demanding MOS for the 10% female fill and for most demanding MOS for the 10% male fill.

Table III-13

NUMBER OF OFFICER AND NCO OBSERVED VALUES HIGHER OR LOWER THAN EXPECTED PROPORTIONAL VALUES ( $E_p$ ) AT THE 10% LEVEL FILL OF EM AND EW

Number of:	Officer		NCO		Total	
	EW	EM	EW	EM	EW	EM
Observed values HIGHER than $E_p$	19	15	18	16	37	31
Observed values LOWER than $E_p$	1	4	2	4	3	8
Observed values EQUAL to $E_p$	0	1	0	0	0	1

Observed values which are higher than expected values give support to the "concentration" hypothesis. Most of the observed values for both the 10% female fill and the 10% male fill were higher than expected values and, of these differences, the majority were statistically significant. Also, officers and NCO's tended to agree in their assignments. This finding demonstrated that, at the 10% level of female fill, women were generally overassigned to the least demanding MOS. The same pattern was true with men at the 10% level. They, too, were not assigned proportionally to the most physically demanding MOS but generally were concentrated in these MOS. In general, then, at the 10% level, assignments of men and women were concentrated in the traditional male and female jobs, respectively.

Table III-14 presents the data for the 10% to 35% increment interval for both men and women for NCO and officer responses. The table shows the number of times observed values were higher or lower than the expected number to be assigned under the "incremental concentration" hypothesis, separately for MTOE's in which the "proportionality" hypothesis for the 10% fill level was rejected with statistical significance (lending support to the "concentration" hypothesis) and for MTOE's in which the "concentration" hypothesis was not well defined. The "incremental concentration" hypothesis is meaningfully pursued for the incremental assignment (difference between 10% and 35% assignments) only when the "proportionality" hypothesis for the 10% level assignment can be rejected at the .05 level of significance for a difference in the direction which supports the "concentration" hypothesis. Hence, one should look at the differences between observed values and expected values under the "incremental concentration" hypothesis only for those companies in which the 10% level assignments were higher than  $E_p$  to a statistically significant extent.

It can be seen in the upper portion of Table III-14 which concerns MTOE's in which the "proportionality" hypothesis at the 10% level was rejected that the majority of observed values, for both officers and NCO's, were lower than values expected under the "incremental concentration" hypothesis. Of these 44 values that were lower than  $E_{ic}$  (i.e., in the direction of  $E_{ip}$ ) about two-thirds (28) were significantly lower than  $E_{ic}$  (at the 5% level of statistical significance). Only seven of the observed values were higher than incremental concentration expected values ( $E_{ic}$ ), and of these, four were significantly higher than the expected values. These four instances involved either maintenance or supply and transportation companies. The physically more demanding jobs in these units did not correspond to those most likely to be assigned to FAST or Contact teams; this felt need to consider the suitability of female soldiers for inclusion on these teams that work with combat brigade personnel well forward of most support unit activities may have taken precedence over consideration of physical difficulty of MOS tasks in these units. No direct statistical test of this suitability hypothesis was made because the presence of this effect had not been anticipated prior to the examination of results.

Table III-14 shows that the "incremental concentration" hypothesis was not supported in the 10% to 35% increment interval, as women were not concentrated (overassigned) in the least physically demanding MOS and men were not concentrated in the most physically demanding MOS. Therefore, it can be concluded that when two and a half times as many more women were to be assigned (the difference between the 10% and 35% levels), there was a tendency to spread job assignments more equitably among men and women, thus making assignments in a more proportional manner in the 10%-35% increment interval than was done at the 10% level. When the male proportion was increased to as much as 35%, men were also assigned more proportionally. Hence, the data from the supplemental questionnaire appear to show a pattern of increasing proportionality of assignments as the proportion of either males or females increases.

Table III-14

THE RELATIONSHIP OF OFFICER AND NCO  
OBSERVED INCREMENTAL INTERVAL (10%-35%) VALUES  
TO EXPECTED INCREMENTAL CONCENTRATION ( $E_{ic}$ ) VALUES

	Officer		NCO's	
	EW	EM	EW	EM
MTOE's in which Pro- portionality Hypothesis at 10% level is rejected with statistical significance				
Observed values <u>Lower</u> than $E_{ic}$	10	9	14	11
Observed values <u>Higher</u> than $E_{ic}$	<u>1</u>	<u>3</u>	<u>0</u>	<u>3</u>
Total	11	12	14	14
MTOE's in which Incremental Concentration Hypothesis is not well defined				
Observed values <u>Lower</u> than $E_{ic}$	6	6	2	4
Observed values <u>higher</u> than $E_{ic}$	2	2	3	2
No information	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>
Total	9	8	6	6



One of the important implications of these findings is that factors other than physical strength enter the decision making process about assignments of women. For instance, in the posttest officer and NCO questionnaires, respondents were asked to check the factors which contributed to task failure due to too many women. (These data are reported in Table B-44 in Appendix B.) The factor checked most often by NCO's was that failed tasks were unsuitable for women because too much strength was required. However, NCO's checked the item alternative "tasks were unsuitable for women for reasons other than strength" almost the same number of times. NCO's also indicated that inappropriate training, the factor most often chosen by officers, was a major reason for failure. These attitudes of unit leaders suggest that accomplishment does not depend solely on physical strength.

### 3. DEPLOYABILITY

Prior to the field exercise, information was collected both at Fort Riley and in Germany on deployability of both men and women. Forms were developed for gathering the data from two primary sources: company records and interviews with supervisors and nondeployables.

Table III-15 summarizes for the companies in REF WAC the numbers available, the numbers nondeployable, and the percentages, for men and women separately. This table shows that 15% of the available men were nondeployable versus 29% of the women. Percentages were approximately alike for Europe-based troops and Fort Riley-based troops and did not differ essentially from the overall percentages.

Table III-16 presents a percentage breakout for men and women of the reasons that were identified for nondeployability. It can be noted that 11% of the women who could have been assigned were nondeployable for personal reasons, in comparison with 2% of the men. On the other hand, as one might expect, the percentages for men and women are more similar (12% versus 15%) for administrative reasons. A report now in process will provide more detailed analysis of deployability results.

### 4. QUESTIONNAIRE RESULTS

#### a. Demographic Characteristics of Sample.

Both the pretest and posttest enlisted questionnaires were a source of information about the background of the personnel involved in the REFORGER exercise. Enlisted men and women responded to a variety of questions about themselves without identifying themselves as to name or service number. These variables afford a picture of the make-up and characteristics of the sample which was studied.

Table III-15

## EM AND EW NONDEPLOYABILITY

Base	EM			EW		
	N Available	Nondeployable N	%	N Available	Nondeployable N	%
Europe						
1st Maint Bn	508	103	20	62	26	42
3rd MP Co	161	14	9	13	0	0
1st MP FWD	52	7	13	7	2	29
385th MP Bn	192	9	5	30	1	3
3rd S&T Bn	<u>295</u>	<u>32</u>	<u>11</u>	<u>50</u>	<u>17</u>	<u>34</u>
Total Europe	1208	165	14	162	46	28
Ft Riley						
701 Maint Bn	470	102	22	44	17	39
1st Med Bn	179	24	13	35	13	37
121 Signal Bn	565	76	13	82	17	21
1st MP CO	197	12	6	4	2	50
1st S&T Bn	<u>320</u>	<u>49</u>	<u>15</u>	<u>31</u>	<u>8</u>	<u>26</u>
Total Riley	1731	263	15	196	57	29
Total Overall	2939	428	15	358	103	29

Table III-16

## EM AND EW REASONS FOR NONDEPLOYABILITY

Reason for Nondeployability	EM		EW	
	N	% <sup>a</sup>	N	% <sup>a</sup>
Personal				
Med/Dent (self/family)	61	2	15	4
Pregnancy	-	-	17	5
Compassionate	<u>12</u>	<u>0.4</u>	<u>8</u>	<u>2</u>
Total	73	2	40	11
Administrative				
ETS/PCS	144	5	14	4
Fulfil Enl/Reen Opt	13	0.4	1	0.3
Personnel Action	35	1	3	0.8
Poor Performance	2	0.7	0	0
Special Duty	38	1	12	3
Mission Essential	98	3	21	6
Other	<u>20</u>	<u>0.7</u>	<u>4</u>	<u>1</u>
Total	350	12	55	15
Total Overall	423	14	95	26

Note. Totals do not add to 100% because reasons were not known in every case.

<sup>a</sup>Based on total available: 2939 EM, 358 EW.

Percentage distributions of paygrades reported on the pretest and posttest questionnaires are presented by gender in Table III-17. The paygrade most frequently reported by enlisted men was E4 whereas the paygrade most often reported by enlisted women was E3. The majority of respondents, male and female, reported E3 and E4 paygrades, but the percentage of women in paygrades E3 and E4 was higher than the percentage of men (81% versus 70% on the posttest).

In Table III-18, average age of the enlisted men and women who responded to the pretest and posttest was essentially the same (21 years). Table III-19 reports the highest educational diploma or degree received by enlisted men and women and, in addition, by officers and NCO's. On the whole a greater percentage of enlisted women had higher levels of education (97% H.S./G.E.D. or higher for posttest respondents) than did enlisted men (85% H.S./G.E.D. or higher for posttest respondents). Officers had received a higher level of educational degrees or diplomas than NCO's.

Table III-20 reports marital status. Fewer enlisted women were married than enlisted men (21% of women versus 32% of men, on posttest). However, a higher percentage of enlisted women than enlisted men were engaged (16% versus 10%, on posttest). Overall, the majority (over 50%) of enlisted personnel have never been married.

Due to the interest and concern about the ability of female soldiers to meet the physical requirements of the jobs they are being trained to do, the respondents were asked about their height and weight. As can be seen in Table III-21, on the average, the women were about five inches shorter than the men and weighed an average of 32 pounds less.

Table III-17

PAYGRADES OF RESPONDENTS TO ENLISTED QUESTIONNAIRES  
(IN %)

Response Alternatives	PRETEST		POSTTEST	
	EM (N = 1514)	EW (N = 193)	EM (N = 1588)	EW (N = 204)
E1	4	3	3	3
E2	24	15	20	12
E3	26	44	27	45
E4	39	34	43	36
E5	7	5	7	4

Table III-18

"HOW OLD WERE YOU ON YOUR LAST BIRTHDAY?"

	PRETEST		POSTTEST	
	EM (N = 1511)	EW (N = 192)	EM (N = 1576)	EW (N = 202)
Average years	21.2	21.3	21.3	21.4

Table III-19

"WHAT IS THE HIGHEST EDUCATIONAL DIPLOMA OR DEGREE YOU HAVE RECEIVED?"  
(IN %)

Response Alternatives	PRETEST			
	OFF (N = 133)	NCO (N = 435)	EM (N = 1509)	EW (N = 193)
None	0	3	18	2
G.E.D.	3	22	10	8
High School	6	62	64	81
Associate's	8	11	6	4
Bachelor's	62	2	2	4
Graduate or professional	21	1	1	2

	POSTTEST			
	OFF (N = 146)	NCO (N = 482)	EM (N = 1584)	EW (N = 208)
None	0	2	15	3
G.E.D.	2	21	10	9
High School	6	62	66	76
Associate's	10	12	6	7
Bachelor's	58	3	2	3
Graduate or professional	24	1	1	2

Table III-20  
"WHAT IS YOUR MARITAL STATUS?"  
(in %)

Response Alternatives	PRETEST		POSTTEST	
	EM (N = 1512)	EW (N = 194)	EM (N = 1588)	EW (N = 209)
Married	32	22	32	21
Engaged	9	16	10	16
Legally separated	2	2	2	3
Never been married	54	56	53	55
Divorced or marriage annulled; not remarried	3	4	3	3
Widowed	0	0	0	2

Table III-21  
"HOW TALL ARE YOU?"  
"HOW MUCH DO YOU WEIGH?"

	PRETEST		POSTTEST	
	EM	EW	EM	EW
Height (inches) Average	70.3 (N = 1486)	65.1 (N = 190)	69.8 (N = 1765)	65.1 (N = 199)
Weight (pounds) Average	165.4 (N = 1492)	131.9 (N = 193)	166.7 (N = 1563)	132.1 (N = 195)

b. Factors Important to Accomplishment of Combat Mission.

On the posttest questionnaire, officers and NCO's were asked to indicate what percentage various factors contribute to the ability of a company to accomplish its combat mission. Table III-22 contains the officer and NCO responses broken out for those who had combat and combat support experience in Vietnam and those who did not have such experience in Vietnam. Table III-22 shows that all groups (officers and NCO's, with and without experience in Vietnam) rank ordered the factors in the same way. "Leadership" ranked at the top (30%-40% contribution to combat mission accomplishment), and "content of women" ranked lowest (2%-5% contribution). In addition to the ordering of factors, the percentages assigned to each factor were similar for each of the four groups of respondents. Officers and NCO's assigned similar percentages to the same factor, and this similarity tended to hold whether or not a respondent had experience in Vietnam. For example, each of the four groups of respondents assigned 20% to the "morale" factor. "Personnel turbulence" showed the most variation in response between officers and NCO's. NCO's with no Vietnam experience assigned it 10% contribution, whereas officers with Vietnam experience assigned "personnel turbulence" only 5% contribution.

Thus, it can be concluded that both officers and NCO's agreed on the relative importance of these factors in combat mission accomplishment and that Vietnam experience did not appreciably change these evaluations. It should be noted that the content of women was considered to be of very minor importance in combat mission accomplishment.

With respect to attitudes toward going into combat, all four groups of questionnaire respondents (officers, NCO's, enlisted men, and enlisted women) demonstrated similar patterns of responses. Responses to these questionnaire items are shown in Tables B-45 through B-48 in Appendix B. Posttest results concerning "who would do almost anything to avoid going into combat" are summarized below.

Respondents	Percent of respondents who believed	
	EW would do almost anything to avoid combat	EM would do almost anything to avoid combat
Officers	36	7
NCO's	55	18
Enlisted Men	61	17
Enlisted Women	48	29

Table III-22

"WHAT PERCENTAGE CONTRIBUTION DO EACH OF THE FOLLOWING FACTORS MAKE TO THE ABILITY OF A COMPANY TO ACCOMPLISH ITS COMBAT MISSION?"

- PERCENTAGES GIVEN BY THOSE WITH COMBAT AND/OR COMBAT SUPPORT EXPERIENCE IN VIETNAM AND OF THOSE WITH NO SUCH EXPERIENCE -  
(Median Results)<sup>a</sup>

Factor	POSTTEST			
	OFF		NCO	
	Experience (N = 53)	No Experience (N = 90)	Experience (N = 220)	No Experience (N = 197)
Leadership	40%	40%	40%	30%
Training	23%	25%	20%	20%
Morale	20%	20%	20%	20%
Personnel Turbulence	5%	9%	6%	10%
Content of Women	2%	3%	5%	5%
Other	0%	0%	0%	0%

<sup>a</sup> In this table median values are given because the median was considered more representative of the central tendency of the respondents than the arithmetic mean. The median is less affected by atypical extreme responses. Median values do not necessarily add to 100.



All groups of respondents perceived more women than men as doing almost anything to keep from going into combat. Fewer officers believed either EW or EM would try to avoid combat than did the other groups. As pretest and posttest responses were very similar for all groups, the experience of participating in the field training exercise did not seem to have any significant impact on opinions tapped by this questionnaire item.

### C. Sex Role Attitudes Scale.

The Sex-Role Attitudes Scale<sup>6</sup> consisted of items which appeared in the pretest and posttest questionnaires for officers, NCO's, and enlisted personnel. The raw scores on the questionnaire items were converted to standard scores<sup>7</sup> and the standard scores were then summed. The average total standard scores of male and female officers, NCO's and enlisted personnel on the Sex-Role Attitudes Scale are shown in Table III-23. Higher scores on the scale indicate more positive attitudes toward women, and lower scores indicate more negative attitudes toward women. In each group (officers, NCO's, and enlisted personnel), women had higher average total scores--i.e., more favorable attitudes toward women--than did men. All differences between male and female respondents for the three groups (officers, NCO's, enlisted) were statistically significant at the 1% level on both pretest and posttest, except for the posttest difference between male and female NCO's which failed to attain statistical significance even at the 5% level.

As can be seen in Table III-23, attitudes tended to change somewhat from pretest (before REFORGER) to posttest (after REFORGER). The attitudes of male officers and male NCO's became more favorable toward women (scores increased), and the attitudes of female officers and NCO's became less favorable (scores decreased) between the pretest and the posttest. Attitudes of enlisted personnel, however, showed a reverse pattern. The attitudes of male enlisted personnel became less favorable toward women (scores decreased) and the attitudes of female enlisted personnel became even more favorable from pretest to posttest (scores increased).

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<sup>6</sup>The development of this scale is described in Woelfel, J. C., Savell, J. M., Collins, B. E., and Bentler, P. M. A preliminary version of a scale to measure sex-role attitudes in the Army. Arlington, VA: US Army Research Institute for the Behavioral and Social Sciences, 1976. Research Memorandum 76-3.

<sup>7</sup>This statistical procedure changes the raw scores on each item into scores which have an average of "0." Hence, half the standard scores will be negative, and half will be positive. The procedure makes it possible to compare items which have a different number of alternatives.

Table III-23

TOTAL STANDARD SCORES ON SEX ROLE ATTITUDES SCALE FOR  
OFFICERS, NCO'S, AND ENLISTED PERSONNEL

Respondents	Pretest		Posttest	
	N	Score	N	Score
Officers				
Male	116	** { - .1 5.7	127	** { .2 4.4
Female	9		9	
NCO's				
Male	393	** { .3 3.8	433	.4 2.4
Female	12		15	
Enlisted				
Male	1420	** { - .6 3.8	1471	** { - .8 4.7
Female	179		192	

\*\* Statistically significant at the 1% level.

At present, there is no obvious explanation for these results. Further analyses will investigate the effect of having worked with women on the attitudes of respondents. As discussed in a previous section, responses to questionnaire items concerning the evaluations of male and female performance during REFORGER showed generally increasingly lower evaluations of female performance as compared to evaluations of male performance by NCO's who had worked frequently with women. Yet the data reported in Table III-23, reveal more favorable attitudes by NCO's after REFORGER than before. Explanations of such discrepancies await further analysis.

d. Differential Treatment of Men and Women by NCO's and Officers.

Responses to items pertaining to differential treatment of men and women are contained in Tables B-49 and B-52 in Appendix B.

In general, a sizeable proportion of all respondents (officers, NCO's EM, and EW) believed NCO's treated women differently than men. As can be seen in Table B-49 in Appendix B and summarized below, at least half of each group believed there was differential treatment prior to participating in the field training exercise (pretest). The summary also shows that a slightly smaller proportion of respondents believed women were treated differently than men during the field training exercise (posttest).

Percent of Respondents Reporting Differential Treatment by NCO's

Group	Pretest	Posttest
Officers	50	30
NCO's	53	40
EM	52	47
EW	58	43

Table B-50 in Appendix B indicates the kinds of differential treatment that the respondents perceived. Except for EW respondents, roughly a third to two-thirds of the respondents thought that women received more privileges, easier jobs, help on the job, and more attention to their personal problems. The responses of the four groups to the alternative "more privileges for women" are given below.

Percent of Respondents Reporting More Privileges for Women by NCO's

Group	Pretest	Posttest
Officers	31	31
NCO's	48	50
EM	47	51
EW	16	16

The proportion of women reporting a given type of differential treatment was consistently smaller than the proportions of the other three groups reporting that kind of behavior.

Table B-51 in Appendix B contains a summary of the responses to the item which asked if officers treated men and women differently. As can be seen below, the results were similar to those for differential treatment by NCO's except that somewhat smaller proportions of all groups reported differential treatment by officers.

Percent of Respondents Reporting Differential Treatment by Officers

Group	Pretest	Posttest
Officers	44	30
NCO's	37	35
EM	37	38
EW	30	35

The types of differential treatment by officers perceived by the respondents are given in Table B-52 in Appendix B. Again, the pattern was similar to that concerning differential treatment by NCO's. As an example, the responses of the four groups to the alternative "more privileges for women" are shown below.

Percent of Respondents Reporting More Privileges for Women by Officers

Group	Pretest	Posttest
Officers	32	40
NCO's	44	54
EM	46	51
EW	16	21

As can be seen in Tables B-50 and B-52 in Appendix B, one of the alternatives for types of differential behavior was "other." Large percentages of women checked "other" (40% on pretest, 42% on posttest). An inspection of the data revealed that a variety of behavior was reported here. Some examples: harsher treatment for women, better treatment for men, men being favored, women ignored, women given less work or no assignments at all, and other indications of bias against women. These comments indicated that officers and NCO's were similar in ways in which they treated men and women differently. For both officers and NCO's, the differential treatment described in the "other" category was perceived by most women as unfavorable to EW.

## PART IV

### BRIEF OF MILITARY REPORT

#### 1. INTRODUCTION AND OVERVIEW

An "Interim Report on Women in the Army, REFORGER 77" was prepared in November, 1977 as a part of an In-Process Review presented on 6 December 1977. This military report, provided by the REF WAC Test Director to the ARI Commander, also served as the preliminary report to the test proponents on the Test Directorate organization, data collection plan, operational conduct of the test, partial results and tentative conclusions, and recommendations of the REF WAC 77 Directorate immediately prior to its dissolution. As such, the report included some preliminary quantification and interpretation of objective data, as well as reporting of the observations, interpretations, conclusions, and recommendations of the separate teams of the Directorate. The initial quantified results included in the military report are redundant with the more complete analysis presented and described in Part III, and are not provided here. This brief, therefore, deals only with the non-quantified aspects of the experiences and expert opinions of the REF WAC Directorate members related to their evaluation of women's performance and women's impact on unit effectiveness under field conditions over an extended period of time, specifically during a REFORGER exercise.

This brief consists of a merger of the efforts of a contractor tasked to provide the essence of the military report without attempting to evaluate or screen content on either merit or consistency with the other parts of the report, and a similar effort on the part of the Deputy Test Director who remained in ARI until this report was submitted. The brief represents a joint effort by the latter and the ARI scientific staff.

#### 2. CONCEPTS

##### a. Organization.

To manage the effort, the REF WAC 77 Test Directorate was established with 50 people organized into five observer teams to evaluate performance in maintenance, medical, military police, signal, and supply and transportation battalions deployed or participating in the REFORGER exercise in Germany. Each team contained branch-qualified officers, one combat arms officer, one female officer, two other branch-qualified officers and enlisted data collectors. They received thorough orientation on all aspects of the exercise and participated in the development of each of the rating modules. The placement of observer teams in close proximity to the rated individuals, teams, and sections was crucial to the results.

b. Methodology.

Initial criteria for group event rating modules were extracted from recent ARTEP experience. Individual performance standards for individual event rating were taken from Soldier's Manuals. Personnel records were screened from the units selected, including 360 women (of which 229 were deployed) and approximately an equal number of male counterparts. Rating modules were developed for three performance categories: job-specific tasks, sustainment tasks (e.g., tent pitching), and tactical tasks, (e.g., perimeter guard). In order to identify performance trends, the ratings for each module were obtained for the beginning, middle, and ending periods of the 10-day field exercise. To provide a basis for comparison, both male and female enlisted soldiers were rated. In addition to the individual ratings, team performance (all male groups, all female and mixed groups) was rated.

These time-phased evaluations, monitored on a daily basis, were augmented with interviews of all supervisors in the unit chain of command. Some flexibility in the collection effort and the opportunity for judgmental expression were provided by use of formatted reports. The reports included anecdotal comments on leadership, morale, etc., and a log of positive, as well as negative, incidents involving women, using a form labeled "Critical Incidents" (see Appendix A). These inputs, when combined, provided supportive data that could be used to validate the results or fill in gaps in the data base.

c. Limiting Factors.

Objective observations were constrained by a number of factors. These factors included:

(1) An obligation of the Test Directorate to USAREUR not to interfere with REFORGER or Exercise CARBON EDGE. Rules of noninterference permitted team members freedom of movement, observation and interview only on a nonpre-emptive basis. No action could be taken to increase the number of women in the exercise area nor increase the number of observations of individual and unit performance.

(2) One of the USAREUR based battalions, a military police unit, supported the exercise, but not in a player status. The unit was situated administratively in a tent city. As a result, no observations of this battalion could be made in tactical and field sustainment activities.

(3) A significant number of scorable events did not occur because of low levels of activity in combat support and combat service support units. For example, the DISCOM of the 1st Infantry Division, once deployed in the maneuver area, did not make a subsequent displacement. Major portions of two DISCOM units, the medical and maintenance battalions, remained in one location for two weeks.

(4) In the limited sample base of 229 women in the four CONUS and three USAREUR battalions selected for observation in the exercise area, 38 percent of these women were employed in such traditional roles as clerks and cooks.

### 3. FINDINGS AND CONCLUSIONS

Despite the limiting factors described above, the REF WAC Test Directorate staff recorded over 1800 observations of female performance as individuals and members of teams or sections before and during REFORGER 77 and Exercise CARBON EDGE. After-action reports, postexercise questionnaires, and final critiques indicated that REFORGER 77 did in fact provide a viable means of assessing the impact of women on units operating in a protracted field environment. The significant findings and conclusions deal with:

#### a. Impact on Unit Effectiveness.

##### (1) Findings.

Women were observed performing in a wide cross section of Army combat support and combat service support units at the division and corps level. The branches and/or specialty areas covered were maintenance, medical, military police, signal, and supply and transportation. It was determined that the women had little or no adverse impact on the performance of their units. In a general sense, the women observed were contributors having a favorable impact on unit performance.

The following incidents, which far outnumbered derogatory ones, clearly demonstrate the contribution to unit effectiveness made by the conscientious, hard-working, and well-motivated female soldier:

(a) An enlisted woman was released from convalescent leave following major surgery. She was going to be left behind at Fort Riley but insisted on participating in REFORGER. Her performance was outstanding during the exercise.

(b) Two somewhat irresponsible male MP partners were split up by the supervisor. The supervisor paired one enlisted male with an enlisted woman, observing that the woman would "straighten him out."

(c) Two enlisted men told a REF WAC 77 observer that if they had to choose a partner, they would just as soon pick the new-enlisted woman, who had a reputation as a good worker.

(d) A female MP on the third day of the exercise required minor surgery for an infected finger. She expressed the desire to remain in the field, and was able to return to duty and continue her good performance.



(e) A female MP was performing duty at a traffic control point when she experienced a severe toothache. She was given emergency dental treatment and chose to return to duty rather than stay quartered in her billet.

(f) On the eighth day of the exercise, an enlisted woman went on sick call with the diagnosis of pneumonia. She had been working long and irregular hours with less than adequate sleep.

Some unit policies, which were preferential in nature and on the surface appeared to be helpful to women, did not promote participation of women in unit activities. These policies tended to alienate men who perceived assignment based on sex as favoritism toward women. The following critical example clearly identifies this mismanagement of resources: A REF WAC 77 observer noted that women in the ambulance platoon of a medical company were unemployed or assigned trivial tasks. When queried, the company commander stated that women were not being employed in the MTOE positions because the units being supported refused to have women in the forward area. The male members of the platoon had to "take up the slack" for these nonparticipants. Nonemployment of women in forward areas was a common but erroneously based policy. Commanders widely believed that Department of the Army policy prohibits the use of women forward of brigade rear boundaries. A policy that precludes women from performing their assigned duties adversely impacts on mission accomplishment.

A major deterrent to determining female impact on unit effectiveness was that frequently there were only a few women to observe; the number of women in units ranged from one or two individuals to, at most, 10 percent of a unit's strength. Despite this small sample, observers were in agreement that the units observed could absorb women as 15 to 25 percent of their strength with no detracting from mission accomplishment. In establishing the level of male/female mix in a given unit type, the primary criterion was analysis of the unit's missions to determine the quantity and extent of tasks the unit must perform that required physical strength. Women's general lack of upper torso physical strength is the principal limiting factor in their performance of duty in the field and has a direct relation to female numbers and duties assigned for any given unit.

## (2) Conclusions.

The assignment of women to a unit had no effect on the capability of the unit to fulfill its mission except in those instances where physical strength was a factor. Unit missions must be analyzed to determine the extent of physical strength required to fulfill those jobs and the male/female mix in the unit established accordingly.

b. Training for Tactical and Sustainment Tasks in the Field.

(1) Findings.

Women demonstrated a general lack of training for and knowledge of life in the field and of tactical operations. This lack of training and knowledge is detrimental to unit survivability in a combat environment. Further, it places an added burden on and causes morale problems among male members of the unit who must take up the slack in any situation where females do not carry their fair share of the load. Under current methods of warfare, no unit is completely safe from ground attack no matter how far removed from the main battle area. Enemy guerilla bands operate in the rear areas seeking opportunities to disrupt the logistics chain. As a result, every unit, combat or combat support/combat service support, must be capable of establishing a strong perimeter defense and be prepared to withstand a full-scale attack, particularly during hours of darkness. Women must be prepared to fight in these situations, operate individual and crew-served weapons effectively, as well as being able to pitch tents, dig latrines, and stand guard duty if they are to carry their fair share of the load. Failure to perform these tasks during REF WAC 77 was not always due to lack of ability. Many women made an effort to acquire the knowledge they needed. However, either the common tendency of men to be protective or male nonacceptance of females often thwarted their efforts to learn. In units where commanders insisted that each individual, man and woman, carry a full share of the load in common tasks, the quality of unit performance was much higher than in units where women were protected or ignored.

The following incidents clearly identify the need for more intensive training for women in basic field duties and tactical skills.

(a) One commander expressed surprise to a REF WAC 77 observer that his supervisors had to spend so much time assisting women in field sustainment tasks. Prior to REFORGER, this commander was positive that women were a total asset to the Army. Viewing their performance, he felt that they were satisfactory in MOS-related areas in the field, but they were little help in setting up tents, camouflage, stoves, performing guard duty at night, staying warm, and keeping their living areas clean.

(b) While in the unit assembly area prior to the start of the tactical exercise, a REF WAC 77 observer asked 14 women if they would fight in combat. This informal survey resulted in 4 positive responses and 10 negative replies. The women appeared mentally to separate their performance in technical specialties from any notion of combat. They viewed their work as specialists in the Army as having no connection with combat.

(c) On the eighth day of the exercise at 0330 hours a communications center vehicle ran out of fuel during an alert. An enlisted woman stated she was afraid to go out and get fuel because of aggressor action. As a result, no communications existed for one hour.

(d) Four women made up a tent-pitching detail. Two of them got into a heated argument on how to pitch the tent. The argument lasted for some time prior to proceeding with the mission, indicating these women had not been trained properly in tent-pitching techniques.

## (2) Conclusions.

Women need more instruction in coping with and participating in life in the field, to include tactical operations. Women's basic, advanced, and unit training must include the same preparatory training for life in the field that men receive. Additionally, both men and women, officer and enlisted, must be thoroughly indoctrinated from the start that all unit personnel, male and female, will share the load in the fulfillment of the common unit tasks.

### c. MOS Proficiency.

#### (1) Findings.

Women were found highly proficient in the accomplishment of MOS tasks in both traditional and nontraditional roles. Women were highly motivated and their skills were as good or better than the males'. The one shortcoming that existed for women in MOS performance occurred in those tasks that required considerable physical strength. Even with this special selection criterion in mind, NCO data collectors identified only eight MOS's that were not recommended for women. One MOS, infantryman, is not authorized for women. Another MOS, military policeman, was not recommended for the reason that women do not possess the knowledge, experience, and training to perform tactical missions--a deficiency that can be overcome through proper training. Other MOS and tasks that the NCO data collectors on the evaluation teams believed could not be performed fully by women are as follows: 63H (tank automotive repairman); 64C (driver); 76W (petroleum supply specialist), 76X (subsistence supply specialist), 91B (medical specialist); and 94B (cook). For all of these MOS, the same basic reason was cited - women do not possess the physical strength/stamina to meet all of the physical requirements of the duties inherent in the MOS. Test Directorate assessments of female capability in all MOS found in the units observed in REF WAC 77 are found in Table B-18 Appendix B. These assessments are based on all data available to the Test Directorate as of November, 1977.

(2) Conclusions.

Women are capable of rendering a proficient performance in any combat support/combat service support unit MOS not requiring a large measure of physical strength. An evaluation of each MOS from this standpoint is in order, to establish the minimal physical requirements necessary and preclude assignment of such an MOS to women (and men) who do not meet these minimum standards.

d. Stamina and Endurance.

(1) Findings.

Analysis of performance data indicated there was little difference in the level of performance of women versus men when measured over a period of some duration. An analysis of male and female individual performance was made in terms of improving and declining trends. Female levels compared very favorably with male levels in all cases. It appeared that women could match the stamina and endurance and maintain performance standards equal to those of men in the field. Furthermore, although given poor preparation for field duty, women did learn to adapt to their new environment. The only area in which they faltered was in performing tasks that demanded upper torso physical strength that they did not possess.

(2) Conclusion.

Women possess the required levels of stamina and endurance to sustain them through an extended field operation.

e. Leadership and Management.

(1) Findings.

Leadership and management problems were widespread among the units observed and appear to be the underlying cause of most problems involving women in the Army. Many units either had policies that were protective of women or ignored women; either case was often passively accepted by the women. One REF WAC 77 team chief made the following statement that illustrates the magnitude of the leadership problem: "It was evident during the evaluation period that there is a lack of ability in the company grade officer and NCO ranks to lead effectively or motivate females operating in a sustained field environment. This stems from two factors, first, a lack of clearly defined instructions on their employment and, second, a lack of training in techniques and methods of motivating

the female soldier." This mismanagement resulted in low morale in the units in which it occurred, and thus in a mediocre unit performance. Also, it created unrest among the male members of the unit who were required to perform extended periods of duty to fill in where the women were either excused or not employed. The practice of either ignoring women or protecting them, demonstrated frequently by first-line supervisors during REF WAC 77, is indicated by the following incidents.

(a) While a mess vehicle was being loaded, two female cooks sat idly in a tent because they were not assigned any duties.

(b) One woman was released from hospitalization on 3 September and was not picked up by her unit until 7 September.

(c) During a unit alert, off-duty women sleeping in a separate tent were not called to defend the perimeter.

(d) A woman stated that women often sleep through guard duty tours with no repercussions and often they were not informed of the duty.

(e) A woman requested assistance from her supervisor in setting up a shelter half. The supervisor did not respond in any manner, but merely walked away.

(f) Four women sat in a tent upon arrival in a new area, not assisting anywhere because they were told they were in the way.

(g) One supervisor stated that the women on his team and other teams refused to change or service generators at night because they were afraid of the dark. As a result, the men on the various teams had to do the work that the women refused to perform, thus creating low morale among the men. The supervisor overcame the obstacle by accommodation, rather than by analyzing the problem, demonstrating his need for training in the management of women. The units in which all personnel, male and female, were required to carry the same load demonstrated much higher levels of unit performance, morale, and esprit.

## (2) Conclusions.

Army leadership training must be expanded to include the methods and techniques for motivating the female soldier. Leaders at all levels in the chain of command must be taught that women in the Army are an integral part of the team and they are expected to carry out all duties commensurate with their rank and job assignment. Instruction in this important facet of leadership is appropriate for service schools, training centers, and unit officer and NCO classes.

f. Bias Against Women.

(1) Findings.

Descending the chain of command from battalion level to that of immediate supervisor, opposition to women in the unit increased. Generally speaking, senior officers, who were farthest removed from the problem, fully accepted women, junior officers appeared indifferent to the problem, and "old soldier" NCO's were openly opposed in word and action. Although NCO's generally admitted that women can perform well in their tasks, most NCO's just do not want them around. This NCO attitude is clearly evidenced in these incidents that occurred during REF WAC 77.

(a) During the course of the field exercise, a female soldier's ability to read a map was challenged by an equal-ranking male. The female had demonstrated satisfactory ability to read a map on two previous occasions as the senior individual in a vehicle. In both instances, she reached her destination in an acceptable manner. On this mission, the male insisted she was in error. As a result the mission failed due to excessive time as the male repeatedly read the map incorrectly. This man was convinced in his bias against females in nontraditional roles that a woman could not possibly read a map.

(b) A platoon sergeant instructed a male sergeant to assist some women in taking down their tent. The sergeant responded by pulling up tent pegs while the women were still in the tent, until he was told to stop and let the women do the work themselves. The sergeant saw this as an ideal opportunity to harass an "undesirable" element (women) in the unit. This one incident probably best documents the real crux of resistance to female integration in the Army. The sergeant was following an order, and he simply did not want women in "his" Army. Female competence was not at issue.

(c) During the course of the exercise, a supervisor related to a REF WAC 77 observer an incident that occurred the previous day. A female enlisted member dropped an engine, pinning her leg, and the supervisor with some disgust had to run to her aid. He felt he was a babysitter and was convinced that women cannot perform adequately with heavy equipment. He also expressed the opinion that this woman would be no better working in an office. His mind had been made up that women are a bother in "his" Army.

(2) Conclusions.

Strong opposition exists at company level and below to the assignment of women to combat support/combat service support units. An Army-wide education program is required that stresses management and employment of women in a positive theme, which underscores the value and importance of women in the Army.

g. Field Clothing for Women.

(1) Findings.

Over 100 female service members were interviewed during REFORGER and questioned on the suitability of female clothing and equipment. None of the women interviewed felt the clothing and organizational field equipment issued to women were adequate for field duty. The chief complaints were that fatigues were not wash-and-wear, were too lightweight to provide adequate warmth, and were ill-fitting. Women's field jackets provided little warmth in 30° temperatures and were discarded in favor of men's field jackets. The women also used male overshoes since there was an inadequate supply of female overshoes. The structure of women's combat boots was not sturdy enough to withstand the rigors of an extended period in the field. The web gear and load-bearing equipment were not designed for the weight-bearing capabilities of women. The suspenders of the load-bearing equipment placed pressure directly on the breast and exerted an abnormal amount of pull across the shoulders and neck. The equipment was very uncomfortable to women especially when used over an extended period of time in the field. Also, gloves and field jacket liners were not made in sizes small enough for women. A shortage of these items had an adverse impact on the comfort, appearance, and morale of female service members.

(2) Conclusion.

A requirement exists for the development of field clothing and equipment for women that can provide them the needed protection and comfort for an extended period of field duty.

h. Female Field Health and Sanitation.

(1) Findings.

Health and sanitation provided for women during REF WAC 77 proved inadequate. The great distance and infrequency of visits to shower points were a source of major complaint among the women. They found helmet baths unsatisfactory and voiced a desire for more frequent trips to the shower point. This requirement for frequent showering received support from the medical observers who verified that, gynecologically speaking, a woman has a greater need for more frequent attention to body cleanliness than a man. For similar reasons, pit type latrines were not satisfactory for women, who sought other sources for relief. They expressed the added concern of possible assault while visiting a darkened latrine site some distance from their billet, although no such attack was ever reported. It was also noted during REF WAC 77 that field medical facilities were not equipped to attend to female-related disorders as evidenced by the following medical shortfalls:

(a) No obstetrician-gynecologist was available within the 1st Infantry Division, nor was one authorized.

(b) Initial planning failed to include particular female medications in the basic drug list.

(c) No vaginal speculums were available within the Division medical elements.

(d) No examination tables with stirrups were available for examining women, nor did the combat support hospital have examining tables equipped with stirrups.

The above list does not identify the full extent of the problems associated with the health care requirements of a large number of women on extended field duty. It does, however, indicate a problem exists that requires special consideration. Since this medical capability was lacking, female-oriented medical problems were necessarily referred to a base hospital some distance from the maneuver site.

## (2) Conclusions.

Requirements exist for the development of field health and sanitation policies and procedures and for the provision of field medical facilities, drugs, instruments, and personnel that more adequately respond to the special health care requirements of women.

### 1. Female Leadership.

#### (1) Findings.

The number of female leaders, officer and NCO, participating in REF WAC 77, was so small that fully supportive findings could not be made. Observers did note isolated incidents in which female leaders either had no concept of how to exercise their authority, or abused that authority. Female leaders were also noted to be lacking in tactical training. Additionally, there were occasions when women experienced difficulty in gaining acceptance as leaders. Their authority was ignored by men who would not accept women regardless of their demonstrated competence. The following incidents exemplify the above:

(a) A female platoon leader constantly exhibited poor leadership and contributed to or was the cause of low morale in her platoon. She could not or would not control her attitude toward the Army or her people in their presence. She demonstrated little respect for her enlisted personnel and gave little guidance to her NCO's. As a result, missions were performed without enthusiasm and morale was low.



(b) A male automotive warrant officer indicated to a REF WAC 77 observer that female NCO's "may not be able to handle the troops." This warrant officer's comment was purely speculative for there were no female NCO's in his technical field at the time, and he had no previous experience with female leaders. The lack of confidence in women expressed by this individual is indicative of male bias against female leadership in a nontraditional area.

(2) Conclusion.

The above observations provide further support for the requirement for improved tactical and leadership training for women as well as an Army-wide education program in support of women in the Army.

j. Female Migrations from Nontraditional Specialties.

(1) Findings.

Of the 229 women participating in REFORGER, 49 were working in an MOS other than their own. Of these, 17 had migrated from a nontraditional MOS to traditional specialties, while three had shifted from traditional to nontraditional specialties. Two women with nontraditional MOS were serving in other nontraditional MOS. The remaining 27, trained in traditional MOS, had migrated to other traditional MOS.

(2) Conclusions.

Slightly over seven percent (7.4%) of the females participating in REFORGER had migrated from nontraditional to traditional assignments.

k. Female Content in Units.

(1) Findings.

(a) Information was obtained from 108 first-line supervisors, 60 unit leaders, 25 observer team members, and 19 NCO data collectors. Their recommendations were taken on proportions of women to be utilized in the combat support/combat service support units under observation. This information concerned male-female ratios by MOS, team, section, platoon, and company. The information reflected both command policies and individual biases in real units in the REFORGER situation, leading to wide variations among the separate units. Illustrations of these variations are found in the reports of the chiefs of the signal and transportation teams. The signal team chief recommended, based on female strength limitation and current tactical proficiency, that no women be assigned to signal letter companies. The transportation team chief recommended, at the other end of the spectrum, the assignment of women in percentages up to 50 percent.

(b) The REF WAC Test Directorate subjectively analyzed this information in the context of observations on REFORGER, taking into consideration tactical and sustainment requirements, to develop recommended upper limits for female content in the observed units. Observations and considerations in deriving these upper limits include:

(1) The current level of tactical training among women observed on REFORGER was well below that of men.

(2) Companies with a high female density would encounter difficulties in operations such as perimeter defense, reaction force, local patrolling, rear area protection (MP units) and interior guard.

(3) The primary rationale used in arriving at recommendations on female content in units is unit proximity to probable combat areas. Units operating in the division rear area could, under this concept, accept a higher female density than a unit operating habitually forward of the brigade rear boundary. An additional consideration was given to the factor of sustainment.

(4) Unit sustainment tasks requiring team efforts in heavy lifting, digging, or hauling over an extended period of time could have an adverse effect on a company with a high female density.

(2) Conclusions.

The REF WAC 77 Test Directorate recommends that the upper limit of female content in the subject combat support/combat service support units be as follows:

<u>UNIT</u>	<u>AUTHORIZED STRENGTH</u>	<u>MAXIMUM FEMALE CONTENT</u>	<u>PERCENT</u>
Maintenance Battalion (MTOE 29-26)			
Headquarters and Light Company	113	29	25
B Company	211	53	25
C Company	173	26	15
Medical Battalion (MTOE 8-37)			
Headquarters and A Company	138	35	25
C Company	76	19	25
Military Police Company (MTOE 19-37H)			
MP Company	166	26	15

<u>UNIT</u>	<u>AUTHORIZED STRENGTH</u>	<u>MAXIMUM FEMALE CONTENT</u>	<u>PERCENT</u>
Signal Battalion (MTOE 11-37)			
HHC	96	24	25
A Company	204	51	25
B Company	123	18	15
C Company	153	38	25
Transportation Battalion (MTOE 29-65H)			
HHC	49	12	25
A Company	140	35	15
B Company	183	46	15

#### 4. FUTURE REQUIREMENTS.

##### a. REFORGER 1978.

(1) The military observers for REF WAC 77 do not recommend a repeat of the experiment for REFORGER 78. It is their belief that sufficient data were obtained during REFORGER 77 to offset the requirement for similar testing in 1978. There would be justification for repeating the experiment in 1978 if positive corrective action were taken on all the REF WAC 77 findings, e.g., female clothing, sanitation, health care, improved training of EW before the scheduled date of REFORGER 78, permitting the testing of innovations effected by this corrective action. If the corrective action is not accomplished by the date for REFORGER 78, then further tests certainly should be conducted at some future date to determine the effects, good or bad, of the corrective action taken based on the results of REF WAC 77.

(2) If the experiment is repeated in 1978, and maximum benefit is to be gained, it is imperative that the test sample of women be greatly increased in number. Also observers must have detailed advance knowledge of the scenario for the organization under study so they can plan for optimum coverage of the female participation.

(3) Recommended changes include:

(a) Predetermined AIT graduate fills of both male and female soldiers in exercise units.

(b) Organization, stabilization and pre-exercise training.

(c) Controlled deployment.

(d) Insertion of exercise-compatible scoring events on a limited basis.

b. Concept for Future Testing.

(1) Concept.

This concept calls for the controlled fill, organization, stabilization, training, and testing of teams and sections of the selected units. The research effort would be conducted over a 6- to 9-month period in five phases.

(a) Phase 1. DA would identify five CONUS divisions having combat support and combat service support units similar to those observed during REF WAC 77. Each of the divisions would accept a fill of male and female AIT graduates in one of the five branch areas evaluated in REF WAC 77 (maintenance, medical, military police, signal, and supply and transportation).

(b) Phase 2. Divisions would organize, stabilize, and train male and female AIT graduates in team/section mixes recommended by the REF WAC 77 study. Control team/sections which are all male, would be similarly organized and trained.

(c) Phase 3. A small test directorate would be established under DCSPER. The directorate would place monitors at each division location to observe the organization, stabilization, and training of the units.

(d) Phase 4. The directorate, augmented with personnel and equipment assets from each participating division, would test individual MOS proficiency using skill qualification tests and unit proficiency using the standard applicable ARTEPs under highly controlled conditions. Testing could be accomplished in 48 to 72 hours.

(e) Phase 5. Evaluation and reporting of test results would include a comparative analysis between test and control units and a further comparison of these results with REF WAC 77 findings by team and section in each branch area.

(2) Advantages.

The REF WAC 77 Military Test Directorate concept for future testing offers several distinct advantages.

(a) The concept is flexible in scope and can be limited or expanded as desired in terms of numbers and types of team and sections to be evaluated.

(b) The research effort can be accomplished exclusively in CONUS.

(c) This research effort need not be linked to scheduled exercises.

(d) Because the research staff can be relatively small and assets to support the effort can be locally furnished, fund expenditures would be modest.

## PART V

### INTERVIEWS WITH ENLISTED WOMEN PARTICIPANTS

#### AND NCO DATA COLLECTORS

#### 1. INTERVIEWS WITH SELECTED ENLISTED WOMEN PARTICIPANTS

##### a. Introduction.

Approximately two months after the completion of REFORGER 77, ARI conducted interviews at Ft Riley with 40 EW who had taken part in the exercise. These 40 EW previously had been identified as the best and the poorest EW performers on the field-exercise portion of REFORGER. The identification was indicated by the average of the daily performance ratings given them by their immediate supervisor(s) in the field, using a 7-point scale. This scale is described in Part II of this report. The women selected for interviewing were the 20 with the highest average daily performance ratings (range: 6.7 to 7.0) and the 20 with the lowest average ratings (range: 3.7 to 5.1). The purposes of these interviews were (1) to identify background characteristics, e.g., prior Army experiences which might be useful in the future in trying to predict quality of performance in a field exercise, and (2) to obtain additional information about REFORGER 77. (See Appendix A, pp. A-128, 129.)

##### b. Pre-Army Experiences and Performance.

It was hypothesized that the performance of women on REFORGER would be related to previous field experience in the Army or outdoor experience prior to the Army. As such, the high performers likely would have had more pre-Army experiences with camping and hiking, as well as other outdoor activities. This expectation, however, was not supported by the interviews. In fact, more low than high performers said they had had pre-Army camping experience and that they had been known as "tomboys" while growing up.

Further querying of the women about pre-Army factors which might have influenced their ability to perform on Army field exercises was not fruitful. There was virtual unanimity among the respondents in their inability to recollect any such pre-Army experiences.

##### c. Army Experiences and Performance.

The interviews also failed to support the contention that field performance on REFORGER would be related to previous field experience in the Army. There was little difference between high and low performers in terms of previous Army field experience.

While previous camping or field experience was apparently unrelated to performance during REFORGER 77, prior experience with the particular job performed during REFORGER was possibly related to performance. An examination of MOS-mismatch (defined as not working in one's PMOS) showed was no difference between low and high performers on this dimension. Further probing of the women, however, uncovered a potential reason why some women performed more poorly than others on REFORGER 77. Six of the 20 low performers (30 percent) noted that while they had worked in their PMOS during REFORGER 77, REFORGER marked the first time they had worked in their PMOS since Advanced Individual Training (AIT). Had they been participating in their PMOS while in garrison prior to REFORGER 77, the women felt they would have been able to perform better during the field exercise. As a matter of fact, some women indicated that their MOS performance improved during REFORGER as they reacquainted themselves with their PMOS. The above point is further reinforced by the fact that no high performer mentioned assignment to another MOS immediately preceding REFORGER 77.

One female mechanic felt that her MOS performance was more difficult in the field, away from the job aids she had in the motor pool. However, there was a paucity of such comments. The overwhelming majority of women did not indicate that job performance was more difficult in the field than in garrison.

d. Performance of Women Relative to Men.

The respondents were asked to compare their own performance to men in the same paygrade and MOS. In general the women felt that their performance was equal to that of their male counterparts. However, some dissatisfaction was expressed over supervisory staffing strategies. Some women perceived that supervisors had a proclivity, when confronted with a sex choice (especially for tasks requiring above-normal amounts of physical strength), to select a male to accomplish the task. This indicated to them that supervisors regarded performance abilities of men as higher than women in many field tasks. This was a source of discontent for many women who did not feel inferior to men in terms of job performance ability.

e. Adjustment to the Field.

Most respondents felt that they were able to adjust adequately to working in the field. There were numerous complaints regarding the sanitary conditions. These complaints focused primarily on the low frequency of showers, the lack of clean latrines, and, in some cases, the fact that the latrines had to be shared with men.

Also, some concern was expressed by women over their safety while walking 100 or more yards from their tents to the latrines at night. Despite their concern with potential assaults, the women agreed that the male soldiers in their own units did not demonstrate excessive sexual aggressiveness toward them during the field exercise. In fact, if anything, the men in their units shielded them from the undesirable advances of men from other units.

One problem the women agreed upon regarding adjustment to the field was that of clothing. The weather in Germany during REFORGER 77 was cool, particularly in the forest. The women said that their fatigues were too thin to afford the necessary protection from the cold. They reported that their own informal comparisons of men's and women's fatigues indicated that the men's fatigues were substantially superior. They recommended that the women's fatigues be improved.

It is important here to distinguish between performance and adjustment. While previous field experience appeared unrelated to quality of performance during the field exercise, the interviews suggested that past field experience did aid adjustment to the field. Many women indicated that their ability to cope adequately with field conditions was enhanced because, from previous field exercises, they knew what to expect. The women, in general, did not feel that adjustment for them was any more difficult than for the men. As one woman noted "they (the men) worked in the same field we did."

f. Leadership and Authority Issues.

The women were questioned as to any leadership or training problems that may have impacted on their performance during REFORGER 77. In general, the women could not identify specific problems in training or leadership, except the lack of sufficient PMOS experience and supervisory staffing procedures.

With regard to the whole question of the authority system within the Army, virtually no woman felt compelled to attack the system. Most were quite willing to take or give orders. However, the women felt that they had a right to ask questions related to orders to determine their purpose. The women also indicated sensitivity as to whether supervisors gave orders in order to accomplish an Army mission, or simply to demonstrate their own authority. There was no basis for determining if these female concerns differed from those of their male peers.

g. Summary.

In general the women interviewed at Fort Riley who took part in REFORGER 77 indicated that they were able to adjust and perform satisfactorily under extended field conditions. They felt that their adjustment and performance were equal to the men. Among the women, the primary factor which distinguished the high performers from the low was prior Army experience with MOS-related tasks performed during REFORGER. A number of the lower performers alleged that they did not have very much prior experience in performing the MOS-related tasks they were called on to perform during REFORGER.

2. INTERVIEWS WITH NCO DATA COLLECTORS

a. Overall Impression of Enlisted Women Performance.

ARI conducted interviews with the NCO data collectors shortly after REFORGER was completed. Some of these interviews were conducted in USAREUR, but most were conducted in Alexandria, VA. Two general impressions arose from reading reports of the interviews with the NCO data collectors. One impression on which there was almost complete agreement was that the effectiveness of the units observed did not suffer as a result of having had women assigned to them. The other impression which did not have complete agreement was that the women, as individuals, did not perform as well as the men on certain tasks. One type of task, that some NCO's said had not been performed as well by the women as by the men, called for physical strength e.g., changing a tire on a 2 1/2 ton truck or lifting a 5-gallon gasoline can. In part, the question is simply whether an individual woman has the strength or not to perform the tasks. In part, however, the question is also whether the (primarily male) supervisors think the women can perform them. Rather consistently, women gave many more favorable opinion of what they could do than the men gave. [Many women reported either that they were not asked to perform certain tasks or they avoided them by asking (even with insufficient justification) not to be required to perform them.] Without further research, therefore, it is not possible to say how much of the alleged inability of the women to perform some tasks was an actual inability and how much of it was not. In any event, when a supervisor considered a particular task too demanding physically for an EW to perform, he would usually assign the task to an EM. When this happened, some of the men would complain while others felt that they ought to help the women with these tasks. (See Appendix A, page A-127.)



The other type of task which (according to some of these NCO's) was not performed as well by the women as by the men was the type of task that calls for special field training and experience, e.g., erecting a tent or lighting a stove to use in heating the tent. It was the opinion of the NCO's that many of the women hadn't been given adequate training, e.g., in BCT/AIT. Some NCO's said the women were insufficiently trained in how to carry out various tasks that go into an extended field exercise and that, prior to REFORGER, little or no effort was made to compensate for this inadequacy. It is thus understandable that, out in the field, many supervisors preferred to assign such tasks to men rather than take the time required to teach the women how to perform them.

b. Recommendations for Improving Data Quality.

The data collectors provided a number of suggestions for improving future data collections of the same general type. The suggestions can be classified into (1) selection of data collectors, (2) training, and (3) housing and transportation in the field.

(1) Selection of Data Collectors.

A number of data collectors suggested that future data collectors should be chosen on a voluntary basis. A data collector should be in the same Career Management Field as the soldiers in the unit observed. Finally, data collectors should be screened by ARI to insure that they are properly qualified. There was no consensus about whether those data collectors should be enlisted personnel (E5 and above) or officers.

(2) Training of Data Collectors.

The data collectors agreed that they needed more training than they had received if they are to perform satisfactorily. The training should focus on the general purpose of the overall research effort, the particular purposes of the data collectors' mission, and the mechanics for collecting the data, e.g., how to fill out the forms.

(3) Housing and Transportation.

Most of the NCO data collectors indicated dissatisfaction with housing arrangements in the field. They felt that they needed their own GP small tent, equipped with a table and some type of lighting, so that they could do the paperwork that goes with the data collection. A number of data collectors also complained about the transportation arrangements. In many cases they were as they put it, "at the mercy" of the units they were observing. In other words, they often wanted to collect data at one place while the vehicle necessary to transport them to that place was elsewhere. As a result, some of the data they considered useful for evaluating the exercise was not gathered.

## PART VI

### INTEGRATED DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

#### 1. SCOPE OF PART VI

Observations and the results of analyses of more objective data have been reported in the preceding parts of this report. An integration of these findings in the context of the total ARI research effort will be attempted in Part VI. The discussion will include the identification of shortcomings of the research to date. The reservations of the ARI scientific staff, in extrapolating results to situations and conditions not in REF WAC, will be explained. The operational implications of ARI research conclusions will be discussed and recommendations for future investigations provided.

#### 2. PLACING REF WAC IN CONTEXT

##### a. The Management Milieu.

The REF WAC research effort parallels with other investigations and management studies, all planned as input for management decisions that have to be made in the Spring of 1978. The decisions relate to optimal numbers and utilization of female soldiers for an effective Army having personnel policies reflecting the will of the American people. Thus, long-range plans for accessioning women into the Army over the next several years will be determined.

One parallel investigation will provide recommendations, based on individual performance tests, as to whether certain MOS tasks can be performed adequately by female soldiers. Where appropriate, the investigation will calculate the cost of modifying tools and/or equipment to permit the utilization of more women. Another parallel investigation will provide recommendations as to the suitability of women for every Army MOS. Survey data provided by military experts and career progression considerations will enter into these recommendations. Several coordinated investigations will provide physical strength tests by late 1978 for possible experimental use in a gender-free selection and assignment system at a still later date.

The REF WAC results provide the best available information on performance of female soldiers in an extended field situation, as contrasted with performance in garrison type duties. Divisional support companies almost always will have installation support missions which do not necessarily mirror their mission of supporting combat brigades on a battlefield. Therefore, the careful distinction between garrison and field missions of support units is essential. Failure to separate the two missions is equivalent to confusing the parade and fighting functions of combat arms troops.

b. MAX WAC Compared to REF WAC.

From summer 1976 thru spring 1977, ARI, augmented by 23 officers and several enlisted soldiers, conducted the force development test "Maximum Women Army Content," (MAX WAC). The goal was to determine the effect of different percentages of female soldiers on unit performance in a 72-hour ARTEP exercise. A total of 40 companies was observed in 55 field exercises with 15 companies undergoing both a fall and a spring MAX WAC ARTEP. Final report on this test was provided in October 1977. MAX WAC performance and questionnaire data supported a conclusion that the addition of up to 35% women had a negligible impact on unit performance during an intensive three-day field exercise for the type of companies tested (maintenance, medical, military police, signal, and supply and transportation). However, the shortness of the 72-hour ARTEP, tentative evidence that female soldiers were more likely than men to be left behind when a support company went into the field, and the lack of data on the performance of mixed gender platoons, sections, or teams, led managers to feel that more data were required before safely assuming that field performance, in general, was not affected by unit content of women (up to 35%).

The inherent characteristics of REF WAC, as compared to MAX WAC, are summarized in Table VI-1.

Table VI-1

CHARACTERISTICS OF REF WAC COMPARED WITH MAX WAC

- 
1. Tasks determined by targets of opportunity; MAX WAC - Tasks evoked by standard scenarios.
  2. Ratings obtained by platoon/section; MAX WAC - Scores obtained by company.
  3. Tasks rated several times during FTX; MAX WAC - Tasks scored once during ARTEP.
  4. Units observed during 3-Week field deployment; FTX; MAX WAC - units observed during 72-hour ARTEP.
  5. Content of women up to 10% (TRADOC limit); MAX WAC - Content of women up to 35%.
  6. Weather and terrain comparable for most observations; MAX WAC - Units observed over a wide range of weather and terrain.
-

In many ways, MAX WAC and REF WAC were quite similar. For example, both involved the collection of performance scores of units or groups and questionnaire responses of soldiers. Both required establishment of a military test directorate to provide the expert raters for scoring field performance.

The first comparison in Table VI-1 contrasts ARTEP tasks elicited by a standard MAX WAC scenario specific to each type of company with the requirement for REF WAC officer evaluators to select tasks to rate as targets of opportunity. In REFORGER 77, if the overall CARBON EDGE scenario and its tactical implementation by the maneuver units did not require specific tactical events, such as for a support unit to defend its perimeter or to react to an ambush while on a road march, then performance on such tactical events could not be rated. Similarly, if exercise participants placed only negligible requirements on a medical unit to care for sick and injured soldiers, there was no work load simulation and the medical unit did not perform many of the tasks required in an ARTEP scenario. Only about one third of the units observed as part of REF WAC changed locations during the CARBON EDGE exercise, while one or more moves were built into every MAX WAC scenario. Apart from the availability of tasks to rate under noninterference rules, the conditions except for weather and terrain, were much more variable and thus less comparable than in MAX WAC. There, each event had a specific place in the scenario and was carefully defined.

A major deficiency of MAX WAC scoring procedures for some types of companies was that the team or group engaged in tasks (comparable to group event ratings) could not always clearly be determined. Thus a task score could not be attributed to a group of a known gender mix. Only the number of women in the unit as a whole could be associated with a task score.

Nor was it possible to compare task scores across the first and second MAX WAC ARTEP (for twice-tested companies). The first ARTEP was scored by local evaluators in addition to (and quite independently of) the MAX WAC officer evaluators. It can be presumed that poorly performed tasks were identified to the company commander (per TRADOC doctrine) to receive greater emphasis in company training. Thus, if training were applied correctly to the tasks most in need of remedial attention, as identified by the local evaluators on the first ARTEP, the second ARTEP should show an entirely different set of tasks as most in need of further training. Obviously, ARTEPs could not be compared, task by task, across two successive ARTEP presentations: comparison of task scores across two successive ARTEPs for the same company would provide a spuriously low estimate of test-retest reliability.

REF WAC tasks (group event ratings) legitimately could be compared across one or more performances during CARBON EDGE without fear that rating modules in themselves would affect future performances. Thus group event ratings could be used whereas only the aggregated event scores i.e., total company scores, could be appropriately utilized in MAX WAC. MAX WAC events were given a single score for a company even though an event such as an ambush, might have occurred more than once in a single ARTEP. In REF WAC, each instance of performance received a separate score, thus permitting a comparison of performance over time.

The opportunity to compare units with a varying number of women in the units observed in MAX WAC is clearly resolved in favor of MAX WAC which had controlled fills up to 35%. Also, some MAX WAC company types were Corps units and thus fillable to 20% women under the limit recommended to DA by TRADOC. All CONUS-based REF WAC units had a TRADOC limit of 10%. Although most units were filled almost to this limit, DA directive to the unit commanders prevented them from leaving more women than men at home. Members of the male cohort selected at Fort Riley were often assigned to FAST or Contact teams during CARBON EDGE. This action greatly restricted the opportunity to compare performance of the male soldiers to matching females, who were seldom placed on these teams that normally operated forward of the brigade rear boundary.

The emphasis on team/group evaluation in REF WAC and the fairly even distribution of women across the support companies that contained women made the distribution of women in the groups within the companies of critical importance. The REF WAC research design would have been facilitated by an assignment policy that concentrated women into a few groups, leaving other groups all male. The availability of mixed gender groups to compare with all-male groups, so essential to the REF WAC approach, depended as much on an uneven distribution of the women as on the total number of women in the company.

c. Limitations on the Generalizability of REF WAC Results.

The value of REF WAC results is necessarily limited by the characteristics of REFORGER 77: the number of female soldiers present; the existing weather and terrain conditions; and the kind of tasks and functions women were required to perform. The noninterference rule meant that standard events could not be generated for rating purposes; that work loads could not be simulated where natural work loads were so light as to limit observational opportunities; and that the variety of observable tasks could not be artificially increased.

Only one-third of the companies that might have been expected to change locations during CARBON EDGE actually moved one or more times. The weather was relatively mild during the actual exercise although in the pine forests where most encampments were placed it was frequently too cold for the comfort of female soldiers who relied on standard issue apparel. It is difficult to predict how well the many women who complained of the cold would have fared if REFORGER 77 had been held midwinter in a colder region. The women may well have complained less if they had been adequately equipped with cold weather gear.

Also, as in MAX WAC, the female soldiers in REF WAC were observed as relatively untrained in tactical and sustenance skills. Whether this finding would occur again in future REFORGERS would be difficult to predict. The new basic training and the increased expectation that women will participate in field exercises will undoubtedly prepare female soldiers to work and survive better in the field than was true of REFORGER 77.

d. Comparison of MAX WAC and REF WAC Objectives.

The MAX WAC Force Development Test had a comparatively simple research purpose and objective, since this effort was initiated to validate unit limits for women as established by TRADOC. An Outline Test Plan (OTP) was prepared by ARI and used for coordination with OTEA, FORSCOM, TRADOC, Health Services Command and several Army Headquarters elements outside of DCSPER. Coordination and approval of the OTP by TSARC established the approach and troop resources to support MAX WAC. The expanded objectives in HQDA LTR 70-76-8 dated 9 November 1976 could not impact on the available resources, field coordination, or research design for MAX WAC. No corresponding change in the OTP could be presented to TSARC for their approval until after most field data was collected. The purpose and objectives of MAX WAC as described in the OTP were as follows:

**"PURPOSE:** To assess the effects of varying the percentage of female soldiers assigned to representative types of Category II and Category III TOE Units on the capability of a unit to perform its TOE Mission under field conditions.

**"OBJECTIVE:** To provide empirical data to test the null hypothesis that specified increases in the proportion of women in selected TOE Units will not impair unit performance. The design and the quality and quantity of data must assure that obtained differences large enough to have practical significance will have statistical significance as well."

Shortly after the HQDA LTR was issued, DA policy makers began to emphasize the need for hard data on the impact of female soldiers by "skill and grade." In the eyes of many potential users of MAX WAC results, this requirement was added to the expanded list of management objectives provided by the above letter as a hoped-for output of MAX WAC. Unfortunately, MAX WAC had not collected the kind of data which would make this possible. MAX WAC test results could not provide a firm basis on which the Army could make its decision regarding the optimum level of female soldiers in the Army. Data were provided for decision-makers only as to the impact that up to 35% women would have during three-day exercises.

The HQDA LTR, dated 27 June 1977 establishing REF WAC, incorporated as much of the managerial requirements unmet by MAX WAC as appeared compatible with the noninterference, short-leadtime utilization of REFORGER 77 as the research vehicle for REF WAC.

e. Comparison of Extraneous, Uncontrolled Factors in MAX WAC and REF WAC.

An independent review of the MAX WAC effort, provided by another Army agency, started during the closing weeks of data collection and pointed out a large number of uncontrolled factors that could affect performance scores. Most of these factors could have influenced results only by reducing the expected performance of units taking their ARTEPs a second time (with increased number of women) as compared to the first time. Thus to the extent these uncontrolled factors were present and affecting results, they were biasing results in the direction of more frequently impaired performance for units with an increased number of women than would be expected to occur otherwise. Some of these factors would not affect REF WAC results, since they related to such things as the controlled fills and differences in command emphasis attached to first and second ARTEPs that did not occur in REF WAC. However, some factors would affect both investigations. For example, the female soldiers of both MAX WAC and REF WAC were the products of the old basic training program that could not have been expected to prepare women fully for service in combat support and combat service support companies.

REF WAC and all other on-the-job comparisons of male and female performance in support units conducted on existing populations are also subject to the criticism that female soldiers in support units are not well-matched to their "same-rank" counterparts in the matching male cohort on age, experience, and intelligence. The difficulty in achieving a good match was due in part to female soldiers in support units tending to have had less experience in support companies. This lack of experience is correlated negatively with performance, while the higher academic aptitude of females (as measured by GT scores) is correlated positively with performance. As more women come into the Army, the relationships of age, experience, and intelligence with gender cannot be assumed to remain the same. There will be more female graduates of the new basic training course, and female educational and test entry standards might possibly be lowered to become comparable to male standards. Hence, REF WAC conclusions emerging from results obtained under today's conditions will require revalidation.

3. INTEGRATION OF PART III AND PART V RESULTS WITH TEST DIRECTORATE FINDINGS AND RECOMMENDATIONS IN PART IV

a. Findings Related to the Primary REF WAC Objective.

Test Directorate findings will be quoted from the Test Directorate's military report and followed by a discussion of other findings. Most of these other findings were obtained after the writing of the military report and are based on statistical analysis of data, a review of interview data, or other REF WAC or MAX WAC information. All quotation marks indicate the military report as a source. A final integrated conclusion will be provided in each case.

(1) Impact of Women on Group Effectiveness.

"Women in units observed had little or no adverse impact on unit effectiveness or mission accomplishment." Very few statistically significant differences were found between the performance of all-male and mixed (including all-female) groups on group event rating modules. For the relatively small number of group event rating modules on which all-male and mixed groups could be paired and their performance evaluated over two or more of the three exercise time periods, mixed groups showed superior performance to matching all-male groups during both the beginning and middle time periods; and both male and mixed groups showed a statistically significant improvement in performance in the middle period as compared with the first period. These results are by no means conclusive because the events on which these results were based represented a small part of the total number of events on which data were collected. One could argue that these events were not representative of the total set of group event rating modules. When the data on all group events occurring in the high stress companies were considered without restricting comparisons between male and mixed groups to those that could be made on the same group event rating modules, the overall average performance of mixed groups exceeded that of all-male groups but the difference was not statistically significant. A similar comparison across all companies, regardless of amount of stress, showed overall performance of male and mixed groups to be essentially equal with a very slight, statistically nonsignificant, advantage accruing to the mixed groups. Dividing this total population of events along different lines--into common (tactical and sustenance) tasks versus tasks unique to each company type--showed an overall slight, but not statistically significant, superiority of mixed groups over all-male groups for the common tasks (events), and a smaller superiority of mixed groups over all-male groups for the unique tasks (events).

Note that the events were not of equal difficulty. Making comparisons on all event ratings without first matching groups on event rating modules would distort the results in favor of the gender category that happened to receive the easier assignments. This consideration may will explain the small superiority attained by the mixed



gender groups--or this difference may well be the result of chance fluctuations. The only safe conclusion is not that mixed groups performed slightly better than all-male groups, but that the above conclusion of the Test Directorate is in fact strongly supported by the REF WAC analyses of group event module ratings.

Other performance data based on daily performance ratings of individuals by supervisors also supported the above finding that no important effects on unit performance were due to the presence of female soldiers, but these results are related more directly to other findings and will be discussed elsewhere. The overall integrated conclusion is that the presence of female soldiers on REFORGER did not impair the mission performance of the support units observed on REFORGER when mission is defined in terms of the REFORGER 77 scenario.

## (2) Tactical Skills.

"Women observed were not as well trained in tactical skills as men. ....It should be noted that none of the women observed was the product of the new basic training....Recommendation: Increase the intensity of tactical training of women during both basic and subsequent unit training." Questionnaire data supported the Test Directorate finding in showing that officers, NCO's, and EM thought that enlisted men performed better than women on tactical and sustenance tasks as well as on MOS-related tasks. Also, the majority of male soldiers and almost half of the female soldiers believed that most women would do almost anything to avoid going into combat with their units. This reluctance may well reflect the self-perception of EW that they have not received adequate training in tactical skills. When individual event rating modules (tasks) were considered separately for common (tactical and sustenance) tasks and unique (MOS-oriented) tasks, female soldiers received a slightly higher average rating than male soldiers for unique tasks and male soldiers performed a little better on common tasks. The difference between men and women in one time period (pre-FTX, common tasks) was statistically significant with the direction of difference supporting the above finding. No statistically significant difference continued into the later time periods. Overall, the quantitative data add little in either support or contradiction of the Test Directorate finding.

## (3) MOS Proficiency

"Women observed were highly proficient in MOS tasks. This finding is equally true with respect to traditional and nontraditional roles. Women demonstrated a strong motivation to improve in MOS skills and noticeably increased in job proficiency during the exercise. ....Initially women observed were not as well prepared as men for field duty and did

not fully know what to expect. Preparatory instructions on field duty may not have been adequate; given the amount of experience women have had in the field women did adapt, remarkably fast and well to field duty." This finding was strongly supported by the results of comparing the average supervisory ratings of male and female soldiers in the six highly stressed companies (i.e., moved one or more times and had more adverse conditions indicated on rating module forms) across beginning and end time periods. The statistical significance (at the .01 level) of the analysis of variance F-test of the interaction of the three factors of gender, high stress vs low stress, and time period, can be attributed to the lower initial rating of female soldiers in high stress companies during the first time period. Thus the differences indicated in Table VI-2 can be said to have statistical significance.

Table VI-2

AVERAGE DAILY SUPERVISORY PERFORMANCE RATINGS IN HIGH STRESS COMPANIES

Cohort	Time Period	
	Begin	End
Male	6.1	6.1
Female	5.7	6.1

These results, based on members of the male and female cohorts who had ratings for all three time periods, showed women receiving initially poorer ratings, possibly because of effects similar to culture shock, but recovering to receive ratings equal to that of the men during the last three days of the exercise. The comparison of ratings of all men and women, for both high and low stress companies, without eliminating the incomplete data cases, showed an increase in effectiveness over time for both sexes. However, there was no difference between the average performance ratings for men and women.

As mentioned under the finding above, there was a statistically significant increase of average group event ratings for both men and women from the first to the middle period with mixed groups retaining their statistically significant superiority in both periods. In addition, the self-assessment of female soldiers obtained in interviews also supported the Test Directorate finding. The overall integrated conclusion fully sustains the finding of the Test Directorate.

#### (4) Leadership and Management.

"The performance of women possibly more than men was affected by leadership and management policies. Leadership and management problems were widespread among the units observed and appear to be the underlying causes of most problems involving women in the Army....Unit policies were often differential or preferential with respect to women....

Recommendations: Department of Army provide detailed policy guidance to the field on the employment of women in tactical and field environments." The questionnaires administered after the field exercise showed that 47% of nonsupervisory EM and 43% of the EW said male NCO's treated men and women differently. Of these, 51% of the EM and 16% of the EW said more privileges were provided to women, while 55% EM and 30% EW said easier jobs were given to women. Of the EW who thought NCO's treated EW and EM differently, 42% provided another explanation as to how they were treated differently. These write-in explanations usually indicated that EW were treated worse than EM. Male officers were thought by enlisted personnel as less inclined than male NCO's to differential treatment of EW and EM, but enlisted men who thought officers treated EM and EW differently more often indicated this difference as preferential for EW. Also, officer and NCO respondents who gave reasons for task failures resulting from "too many women in the unit," checked reasons that indicated poor leadership (such as: women not appropriately trained, supervisor didn't know how to supervise women, or men and women didn't work well together) as often as they checked inadequate strength of women. It is clear that questionnaire responses support the Test Directorate finding and recommendation.

#### (5) Bias.

"The REF WAC Directorate observed considerable and widespread bias in units towards women....The most significant bias found was among first line supervisors, who in many cases were highly vocal in their opposition to women. While these NCO's generally admitted female soldiers can perform well in their MOS tasks, most supervisors simply did not want women around. The reasons most frequently given were strength factors, risk of exposing women to combat, and added problems of hygiene, sanitation, and billeting....Recommendation: Develop and implement an Army-wide educational program to inform service members, particularly leaders, of the female role in the Army and of problems unique to women. Stress management and employment of women in a positive theme which underscores the value and importance of women in the Army." The discrepancy between questionnaire responses of NCO's where four to five times as many EW as EM were said to perform poorly or very poorly on "their jobs during REFORGER" and the daily performance ratings given to individual EW by their NCO supervisors indicated the occurrence of an interesting sociological phenomenon that often occurs with respect to targets of bias. That is, the

individuals of a minority or other target group are accorded their observed value whereas the unobserved members of the target group are presumed inferior. Thus the evidence that women as a group were rated poorly on the questionnaire, although rated as highly as their male counterparts when rated individually, indicated a class bias against women. Also, the large number of EM (almost half) who said NCO's treated EW differently than EM, with only 28% of the EM responding that no difference in treatment existed, provided evidence that NCO's were either providing unequal treatment or had a credibility problem. A sizeable percentage of the EW believed that the discrimination was in the reverse direction of that perceived by the EM who believed treatment was unequal and in favor of women. Possibly both EM and EW were correct in that EW were discriminated against by not being permitted many career and ego-enhancing tasks because NCO's considered the tasks inappropriate for women and in that EM were discriminated against by being required to perform more night duty and physically demanding tasks. However, it appears that the enlisted men and women did not readily accept preferential treatment on one dimension as adequate compensation for discrimination on another dimension. One could argue, though, that differential assignment by NCO's was an attempt to capitalize on the special skills of men and women and thus the NCO's were more even-handed than they were perceived by their subordinates. However, any interpretation of these results leads to the conclusion that training on the special requirements of supervising mixed gender groups is needed. The Test Directorate finding is supported by questionnaire data.

#### 4. RECOMMENDED MALE/FEMALE MIXES BY MOS AND UNITS

##### a. MOS Considered Too Physically Demanding for EW.

An empirical determination of which MOS are in fact too demanding for EW would require ratings of no less than 30 different individuals and occurrences of individual events for each of an adequate set of individual event rating modules. This set of modules would have to contain all of the more difficult and critical tasks required for successful performance of the MOS if it is to represent the MOS adequately. Such an approach is obviously impossible to accomplish under noninterference conditions, and it is not economically practical even if made possible through the imposition of a carefully controlled scenario. The more practical alternatives of measuring performance in laboratory conditions, rather than in a field situation, may be used eventually to validate physical standards for MOS. However, an evaluation of each unit duty position regarding strength requirements using job analysis techniques would be much more practical to apply as an operational procedure and would provide a more accurate appraisal than the opinion data available from REF WAC. Unfortunately, an Army-wide survey of this type might require up to two years to accomplish. Meanwhile, the Army must rely on more subjective estimates of the physical difficulty of MOS duties. These estimates can be found in the responses to the REF WAC

supplemental questionnaire filled out by unit officers and NCO supervisors and in the ratings of Test Directorate personnel. These estimates by unit and Test Directorate personnel as to the physical difficulty of MOS tasks have added credibility, however, due to having been collected soon after the respondents had observed soldiers in a field exercise.

The data from the supplemental questionnaire relate to how many of the respondents believed each MOS in the MTOE of a specific company to be too physically demanding for the average female soldier. Since respondents were not asked how strenuous they believed each job to be, an average difficulty level for each MOS could not be computed from these data. The questionnaire results could be compared to the Test Directorate rating of each MOS as 1, 2, or 3 with a "1" assigned to those MOS for which the Test Directorate believed all tasks could be performed by women in the field and a "2" assigned to those MOS in which most tasks could be performed by women in the field. Only one MOS (telephone installer/lineman, 36C) was assigned a "3," indicating Test Directorate belief that this MOS had "few (critical) tasks within the physical capability of women."

The questionnaire MOS were divided into categories that reflected percentages of unit personnel saying that the MOS were too physically difficult for women. These categories divided the MOS into those said to be too difficult by 33% or fewer, 34% to 66%, and 67% or more of the respondents. Membership in these categories was then compared with whether a "1" or a "2" was assigned by the Test Directorate. Test Directorate personnel and questionnaire respondents generally agreed in judgments of physical difficulty for women of the various MOS. Those believed to be too difficult for women by one-third or fewer of the questionnaire respondents were placed largely by the Test Directorate in category "1," and those MOS believed to be too difficult for women by two-thirds or more of the respondents were placed largely in category "2." Unit officers and NCO's agreed even more closely with each other than they did with Test Directorate recommendations. There were some differences between the opinions of unit personnel and the Test Directorate. Several MOS assigned "2's" by the Test Directorate were designated by only a small percentage of questionnaire respondents as "too difficult" for EW. These MOS occur in signal companies and frequently have female incumbents. Test Directorate personnel possibly placed more emphasis on tasks that occur only at set-up and take-down times, whereas questionnaire respondents were placing emphasis on tasks which occur after set-up. Both unit respondents and Test Directorate personnel nominated some MOS as having tasks that are too difficult for women, even though EW performed well in these positions during REFORGER 77 according to both EW self-assessment and evaluations by their supervisors. The assessment of difficulty may be due to the fact that only a small percentage of respondents had knowledge of the quality of EW performance on a given job.

The REF WAC data on MOS in combination with human factor-oriented findings of the Human Engineering Laboratory and the survey and other data collected by ADMINCEN provide an excellent starting point for a more detailed analysis of MOS duties to identify the critical tasks that are too difficult for most female soldiers. The REF WAC questionnaire results indicated that there is considerable concern, at the troop level, as to the capability of female soldiers to perform many of the critical duties of their MOS in support units.

b. Distribution of EM and EW in Unit MTOE as Recommended by Unit Officers and NCO Supervisors.

The unit's officers and NCO supervisors were asked to show where on their unit's organizational table (MTOE) they would assign specified numbers of EW and EM. These hypothetical numbers of EM and EW were provided as separate tasks for the respondents for numbers making up 10%, 35%, and 50% of the total MTOE strength for EW, and 10% and 35% for EM. Those MOS considered too physically difficult for EW by a large number of respondents and those so considered by only a small number of respondents were separated into two sets and identified as most demanding ("hard") and least demanding ("easy") MOS, respectively. Most officer and NCO respondents concentrated EW in the "easy" MOS and EM in the "hard" MOS, when either 10% EM or 10% EW were being assigned. The additional 25% EW (or EM) required to raise the number being placed on the MTOE to 35% were frequently spread out over more MOS; that is, the concentration in "hard" or "easy" MOS was less.

Results indicated that respondents were following three conflicting assignment policies: (1) place women in less physically demanding MOS and men in more physically demanding MOS (the concentration policy); (2) spread women out so they would not make too large a proportion of the incumbents of any MOS or section (the proportionality policy); and (3) reserve men for jobs that require working in the midst of combat brigades as in supply and transportation FAST teams and maintenance Contact (now called MST) teams (the suitability policy). For small numbers to be assigned, the first policy (concentration) appeared to take precedence, with the second policy (proportionality) becoming more evident as additional men or women were to be assigned. The third policy (suitability) appeared primarily in maintenance and supply and transportation units where the physical difficulty of MOS tasks was obviously relegated to a lower precedence as compared to whether an incumbent of an MOS was likely to be used on FAST or Contact teams. It should be noted once more that the questionnaire item that asked for an explanation of "mission failures due to too many women" received almost as many responses pointed to unsuitability for reasons other than strength as it did responses citing strength deficiency.

The results of the questionnaire supplement showed that unit personnel clearly followed proportionality and suitability objectives in the distribution of women over the MOS in a company. The concentration policy with respect to strength considerations appeared dominant when small numbers of women were to be distributed (or small numbers of men in an otherwise all-female unit), but became less dominant as the mix approached half and half. It was felt that these concerns of unit officers and NCO supervisors are legitimate and should be given further consideration. The question of male/female mix is an important and unresolved issue that requires a more complex solution than the designation of open and closed MOS.

## 5. RECOMMENDATIONS AND CONCLUSIONS OF THE ARI RESEARCH STAFF

### a. Research Conclusions.

(1) A performance decrement did not occur over time during REFORGER 77 for either men or women. The combination of weather, terrain, time in the field, and work load was not sufficiently stressful and fatiguing to induce a decrement in performance over time. Instead, a counter phenomenon occurred in which female soldiers commenced the exercise with performance below that of male soldiers. However, the female soldiers, either recovering from an initial shock or quickly acquiring the needed training and/or field experience, increased their level of performance to equal that of men in the latter part of the exercise.

(2) Female soldiers can provide a creditable performance in the kind of field environment encountered by support units during REFORGER 77.

(3) The MAX WAC results, showing no impairment of unit performances, up to the levels of female content tested, were sustained, except that the number of women in each REF WAC unit was just under 10% as compared to a maximum level of 35% in MAX WAC. The duration of MAX WAC was, of course, 72 hours as compared with the several weeks away from the home installation, including the three weeks under field conditions, and the ten-day participation in the CARBON EDGE exercise experienced by the REF WAC participants. As was true of MAX WAC, this conclusion of no impairment of unit performance directly applies only to like units. Unlike the MAX WAC finding, which implied that 6,000 more EW could be utilized than would be true if TRADOC limits were applied, the effective use of larger numbers of EW than are now in support units such as those in REF WAC is not implied by REF WAC results.

(4) NCO's rated EW in the abstract lower than they rated specific individuals. This finding suggests that an interesting sociological phenomenon which often occurs with respect to minority group members also occurred in REFORGER. That is, the individual members of the minority are accorded their observed value but the unobserved members of the minority group are presumed inferior.

(5) With respect to how well enlisted women performed on REFORGER 77, EM were most critical, NCO's were next most critical, and officers were least critical except for EW who rated themselves as highly as EM rated themselves. The two following interpretations of this phenomenon are possible: (1) proximity and presumed opportunity to observe produces lower ratings (with the exception of ratings by women themselves which are higher); (2) the lower ratings reflect a bias engendered by the assignment of men to "extra" work because of the presence of women (the harder physical labor, more night duty by EM, and more administrative care by the NCO's).

(6) Three sometimes conflicting assignment policies were followed by unit personnel in accomplishing the experimental task of distributing women (or men) to MOS positions in a unit's organizational table (MTOE). The policies and how they were met are listed below:

(a) A comparatively small number of women were placed in the MOS believed to require the greatest strength and a comparatively large number were placed in the MOS believed to require the least strength. In contrast, men were placed in the "harder" MOS. This concentration of men and women according to the perceived physical difficulty of the MOS tasks was most evident when the hypothetical task was to place a small number of either men or women in a company which was predominantly of the other gender.

(b) When the hypothetical task was to place larger percentages of either men or women against the company MTOE, officers and NCO's revealed a second policy of spreading out women across more MOS. Men were similarly spread out, probably to assure some men in each group to do the more physically demanding tasks. This tendency to place women (or men) in numbers proportional to the MTOE strength of each MOS reduced the concentration of men or women that was based on physical demands of the job.

(c) In some supply and transportation and maintenance companies, the hypothetical assignment of 10% men (remainder of company being women) was apparently determined heavily by the frequency with which the MOS occurred in a supply and transportation FAST or maintenance Contact team. This emphasis resulted in a comparatively small number of men being available for placement in the more difficult physical tasks--a number which was actually less than the proportional male share of unit strength. It is not known whether this third policy, suitability, would have been as important if unit personnel had understood and accepted the then very new and as yet undisseminated DA policy permitting female soldiers to be assigned forward of the combat brigade rear boundaries as members of FAST and Contact teams. The importance of a number of factors, in addition to strength requirements, in shaping opinions of unit personnel as to where women are most appropriately utilized remains unclear.



(7) Of the 89 MOS considered (98 MOS were in the MTOE's of the participating units), 18 were designated by 50% or more of officers or NCO supervisors as being physically too demanding for women. Either these jobs are in fact unsuitable for women or training, indoctrination, and leadership within these units had not adequately informed male supervisors of the capabilities and responsibilities of female soldiers.

(8) The percentage contribution of leadership, morale, personnel turbulence, training, and proportion of women "to the ability of a company to accomplish its combat mission" was asked of both unit officers and supervisory NCO's. The percentages assigned these factors by officers ranged from 40% for leadership to 5% for proportion of women in the unit. The rank order of these factors (from high to low percentages) by officers and NCO's was the same as that obtained from officers of the 40 units participating in MAX WAC. Thus, while unit officers and NCO supervisors expressed concern regarding the impact of women on unit performance in both interview and questionnaire responses, they placed much greater importance on other factors as having a comparatively greater impact on mission accomplishment.

b. Recommendations for Future REF WAC-Type Test.

There have been a number of lessons learned from the process of planning and implementing REF WAC. Many of the ARI recommendations for incorporation into any future REF WAC type research effort or force development test require more lead time than could be given to ARI for REF WAC 77. Some of the recommendations relating to lead time are as follows:

- (1) Establish liaison activity with both CONUS-based and USAREUR-based units eight months in advance, or as soon as units are notified.
- (2) Begin collection of nondeployability data six months before units are due to deploy on the exercise. Many of the personnel shifts that occur in that time frame are to accommodate the nondeployables or to avoid taking undesirables without spotlighting such decisions.
- (3) Have all data collection instruments ready in time for preliminary tryouts on troops. These should be timed to make appropriate modifications to assure that all text is understood to mean what was intended.
- (4) Bring Test Directorate officers on board in time to permit training in use of instruments.
- (5) Select NCO data collectors by name after interviews of outstanding candidates.

More USAREUR support would improve the quality of the data collected. Considerable USAREUR support is required for even a minimal effort. Some of the improvements that would require more support than was available for REF WAC 77 follow:

(6) Provide each NCO data collector with a jeep when he/she is covering more than one company.

(7) Officer evaluators and NCO data collectors should live and stay in the units. However, pup tents are not adequate. The requirement for privacy to accomplish required paper work justifies at least a squad tent for evaluator use in each company.

Finally, the difficulty of collecting equivalent data on male and mixed groups under the noninterference condition of REF WAC 77 leads to the last three recommendations:

(8) A future test should include controlled fills of enlisted women in the participating companies. Also, a prescribed concentration of EW in the groups within the companies is required in order to provide an adequate number of all-male groups and comparable groups with a high density of EW.

(9) Have sub-scenarios, or scenario interdiction, to provide simulated work loads and tactical tasks for support units with a capability of doing more than is required in support of the combat brigades.

(10) In the event sub-scenarios or scenario interdiction is denied, rely entirely on supervisory ratings (collected by NCO data collectors) and collateral research questionnaires.

#### 6. RECOMMENDATIONS FOR ADDITIONAL RESEARCH AND STUDIES: FINDING OUT ABOUT WHAT THE ARMY STILL DOESN'T KNOW

##### a. Clearing the Air.

Managers may very well perceive that the primary contribution of MAX WAC and REF WAC has been to clear the air with respect to the belief, erroneously held by many, that female soldiers could not or would not effectively perform their MOS skills in support companies under field exercise conditions, and/or could not maintain their physical and psychological health in the field, and/or would adversely affect the morale of male soldiers to the point that their performance would be impaired. It should now be possible to address, openly and directly, the passionately pleaded concerns of many field commanders that units with large numbers of women may have a reduced readiness for combat because:

(1) The average female soldier in a support unit may be less effective in unit defense than her male counterpart.

(2) The average female soldier in a support unit may not be as useful as a rifle bearing replacement for combat brigades, and may not be as effective as a member of reaction teams to accomplish various tactical contingency mission as compared to a male support company soldier.

(3) Public opinion may require the withdrawal of women from support units in time of emergency as it becomes apparent that they will be in close support of the battlefield, leaving the company with vacancies in key MOS that are heavily occupied by women.

(4) Many combat veterans recall that men on the battlefield, who are about to kill and be killed, have comparatively primitive attitudes towards interpersonal relationships; the maintenance of discipline with respect to the behavior of male soldiers toward women in other units (or even in their own units) could break down, or maintenance of discipline might be at considerable cost to overall unit effectiveness.

Future research should focus on the resolution of these concerns. The first step in this direction should be the clarification of Army doctrine with respect to the expectation (and probability) that support unit soldiers will perform both technical and tactical roles on the battlefield of the future.

The ARI five year research plan for the "Role of Women in the Army" has provisions for research to be conducted on support company reaction teams with prescribed gender mixes performing carefully controlled and measured tactical contingency tasks. Current plans call for using the ARI-developed REALTRAIN "scopes" approach to the measurement of performance on contingency tasks such as reaction to ambushes, perimeter defense, removal of sniper nests, and the establishment and holding of road blocks.

Other research is planned for obtaining more objective performance data on teams and work groups with varying male/female mixes and on the willingness of female soldiers to volunteer for participation in contingency missions. The collection of comparable nondeployability data on male and female soldiers assigned to support units will continue.

A study addressing the utilization of support unit soldiers in technical vs tactical roles for a scenario involving a highly fluid European battlefield should be initiated. For example, the technical mission of a maintenance unit in such a scenario might cease with the actual start of hostilities due to the high state of mobility required of the unit, the poor physical contacts between the unit and the combat brigade being supported, the presence of hostile forces well back of the forward edge of the battle area (FEBA), and the need of the combat brigades for replacements. Existing war games do not reflect player

decisions to cannibalize support units or use support units for tactical contingency missions, although historical studies show such decisions on the part of the defenders to be not uncommon. Modifications to permit such decisions relating to the use of support company personnel as an additional player option would be required before existing war games could provide input to the resolution of this issue.

b. Required Information for Policy Makers.

Major decisions affecting how future wars will be waged are always based on partial information or guesses that are hopefully educated ones. Decisions as to the gender mix of Army units are among those that definitely will affect the resources available to a field commander. Such decisions must be made with only partial information on the nature of future wars, how well soldiers in different mental categories will perform, and the availability of men and women in various mental categories for enlistment into the Army. No existing research results have shed any light on the following questions:

(1) Will women continue to enlist at present rates as higher percentages of female recruits are required to serve in support units and continually demonstrate their deployability and willingness to serve on the battlefield in time of war?

(2) Can changed training and indoctrination procedures induce officers to eliminate preferential treatment of soldiers that is due to gender, and can they convince the troops that preferential treatment has stopped?

(3) Can support unit soldiers of both sexes quickly convert to effective fighters on their own defensive perimeters, as members of unit reaction teams, as combat unit replacements and in ad hoc combat teams assigned to special combat missions? Are there differences in this respect between male and female soldiers?

(4) Can female officers and NCO's effectively lead otherwise all-male or mixed gender reaction teams (or other ad hoc combat teams) in accomplishing tactical missions on a battlefield?

Research-based answers to all the above questions will have to wait until adequate numbers of female soldiers have entered the Army and have received on-the-job training and experience in support units. No amount of research emphasis backed with unlimited resources could have provided answers to these questions by 1978.

c. Planned Additional Analyses on MAX WAC and REF WAC Data.

The prescribed submission date of this report did not permit a number of in-depth analyses of the data. Cross-variable relationships within the REF WAC questionnaire data have not been explored, and several hypotheses relating to the company by company linkage of performance measures and questionnaire responses have not been investigated. Also, while a preliminary analysis showed a relationship between the number of soldiers in a group and group event ratings, this relationship differed for all-male and mixed groups. Although this finding could explain important performance group event rating variance, there was not sufficient time to make the additional statistical checks to verify nonchance relationships. These analyses, and others, will be reported in follow-on technical reports. As in REF WAC, the inter-relationship among questionnaire variables could not be provided in time for the MAX WAC management report, and a follow-on technical report was promised. The analyses required for the MAX WAC follow-on technical report were moved back in priority to permit an early REF WAC reporting date. The MAX WAC collateral research questionnaires included sets of variables relating to differential assignment of male and female soldiers, peer confidence in male and female soldiers under tactical conditions, and attitudes relating to non-traditional roles for women. Technical reports on these topics will be initiated this year.

## ERRATA

### APPENDIX A

The pretest and posttest questionnaires contained in Appendix A were those used in the research described in this report. Typographical errors appearing in the questionnaires are noted below:

<u>Page</u>	<u>Item</u>	<u>Error</u>	<u>Correction</u>
A-49	6	you (1st line)	your
A-55	39	personal (3rd item under "Factor")	personnel
A-62	6	same as A-49	same as A-49
A-68	39	same as A-55	same as A-55
A-79	6	same as A-49	same as A-49
A-85	39	same as A-55	same as A-55
A-92	6	same as A-49	same as A-49
A-98	39	same as A-55	same as A-55

# APPENDIX A

## INSTRUMENTS

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**GROUP EVENT RATING MODULE**

**EVENT:** TL03

**TACTICAL:** Advance party enters unsecured area

**Objective:** Measure extent to which advance party enters new site in a tactical manner.

**Procedure:** Observer evaluates advance party moving into unsecured area on each "jump." Observe the same advance party team each time; observe a team of no more than ten(10) persons.

<u>Scale</u>	<u>Descriptors</u>
7	
6	<ul style="list-style-type: none"> <li><input type="checkbox"/> Team vehicles stop in covered and concealed area, off site, out of range of sight and sound.</li> <li><input type="checkbox"/> Team immediately sets up excellent perimeter security.</li> <li><input type="checkbox"/> Team moves to site using over-watch, short rush techniques and by a concealed/covered route.</li> <li><input type="checkbox"/> Team sets up site security and thoroughly monitors for booby traps, mines, CBR.</li> <li><input type="checkbox"/> Excellent noise control.</li> </ul>
5	
4	<ul style="list-style-type: none"> <li><input type="checkbox"/> Vehicles stop off-site in a concealed area.</li> <li><input type="checkbox"/> Driver and perimeter security maintained with vehicles.</li> <li><input type="checkbox"/> Rest of advance party team moves in a minimally adequate tactical manner to site. (Spread out weapons at ready, no "horseplay").</li> <li><input type="checkbox"/> Monitor of site for booby traps, CBR, mines.</li> <li><input type="checkbox"/> Adequate noise control (no non-mission talking or other extraneous noises e.g., horns).</li> </ul>
3	
2	<ul style="list-style-type: none"> <li><input type="checkbox"/> Vehicle stop off-site but much too close to site and not adequately concealed.</li> <li><input type="checkbox"/> No perimeter security.</li> <li><input type="checkbox"/> Personnel stroll onto site with no attempt at moving tactically.</li> <li><input type="checkbox"/> No monitoring of site for mines, booby traps, CBR.</li> <li><input type="checkbox"/> No noise control (non-mission talking).</li> </ul>
1	<ul style="list-style-type: none"> <li><input type="checkbox"/> Vehicles drive directly onto site.</li> <li><input type="checkbox"/> No defensive perimeter established.</li> <li><input type="checkbox"/> No noise control, no monitoring for mines, booby traps or CBR.</li> </ul>

Tentative score \_\_\_\_\_ Final score \_\_\_\_\_



**SF 77-2b**

**MODERATOR SCORE**  
**(Maximum 3 pts)**

### INSTRUCTIONS

◆EVENT TITLE: Descriptive title of event

\*TOE AUTHORIZED JOB TITLE: As extracted from appropriate line in authorization document.

\*TEAM CODE SEQUENCE NUMBER: Includes team designation and numerical team sequence number as assigned by the team chief e.g., MP01, TC11, SC13, MC03, MT16.

NAME - FEMALE: Name and rank of subject.

**NAME - COHORT:** Same as above. A cohort must be tracked with each female.

UNIT: Designation of company to include battalion headquarters if lettered company.

DTG: Date and time of observation in six numerical digits with the date first-e.g.141305 Aug 77

**OBSERVATION TIME LENGTH:** The time which transpired during the observation.

TIME SINCE LAST REST/WORK BREAK: The amount of time subject has been on duty or since shift began.

MOS: Primary, secondary and duty MOS in that order. Do not interfere with unit. Obtain from NCO data collector and fill in later.

**MOS EXPERIENCE:** Time in duty MOS. Obtain from NCO data collector.

**TIS:** Length of active federal military service. Obtain from NCO data collector.

ENVIRONMENT: Score all items as:

- O - Optimal conditions
- M - Mildly adverse; some negative effect
- S - Severely adverse; substantial negative effect
- NA - Environment not applicable

WEATHER: Did weather conditions (precipitation etc.) inhibit individual in completing the task?

**TERRAIN:** Did the topography (vegetation, road network, etc) inhibit individual in completing the task?

**EQUIPMENT:** Did equipment shortage, unserviceability, etc, inhibit individual in completing the task?

**NIGHT:** Did natural light have any effect on individual performance?

**LEADERSHIP:** If supervision is applicable to event, did its quality affect performance?

**INSTRUCTIONS:** Was individual properly briefed?

**ACTIVITY LEVEL:** Was individual unduly stressed by the frequency of events or external factors? Do not confuse with fatigue.

\*SCORING CRITERIA: Score each event/sub-event as; S - Satisfactory U - Unsatisfactory  
NA - Not applicable

**PERFORMANCE SCORE: (1-7):**

- 7 - Performed all tasks in a superior manner; equivalent to the performance of an outstanding soldier.
- 6 - Performed most tasks in a superior manner, all others at minimum standards; equivalent to the performance of a superior soldier.
- 5 - Performed some tasks in a superior manner, all others at minimum standards; equivalent to the performance of an excellent soldier.
- 4 - Performed all tasks at minimum standards; equivalent to the performance of an average soldier.
- 3 - Performed most tasks at minimum standards; some tasks were failed; equivalent to the performance of a marginal soldier.
- 2 - Performed a few tasks at minimum standards but most were failed; equivalent to the performance of an unsatisfactory soldier.
- 1 - Performed all tasks so inferior as to question MOS qualification of individual.

**ENVIRONMENT SCORE (0-3):** Average letter scores from environmental section above and apply to the following scale, place a number at the bottom of each column in space provided:

0    0.5    1.0    1.5    2.0    2.5    3.0  
0                          M                          S

**OBSERVER:** Name of observer

**EVENT SHEET NUMBER:** Sheet sequence number if observer completes more than one sheet for same individual event.

To be filled in in advance.

PROJECT REF WAC  
INDIVIDUAL PERFORMANCE SCORE SHEET  
(Three Observations Minimum)  
INDIVIDUAL EVENT RATING MODULE

EVENT TITLE Investigate Traffic Accidents  
TOE AUTHORIZED JOB TITLE Military Policemen  
TEAM CODE SEQUENCE NUMBER MP01

REFERENCE DATA:

Name-Female

Name-Cohort

Unit

DTG

Observation Time Length

Time Since Last Rest/Work Break

MOS

MOS Experience (Time)

TIS

ENVIRONMENT:

Weather

Terrain

Equipment

Night

Leadership

Instructions

Activity Level

SCORING CRITERIA:

1. Assesses situation and insures continued flow of traffic.
2. Renders first aid and assists with the evacuation of the injured.
3. Protects the accident scene until essential facts are gathered.
4. Note positions of fatalities and outline in chalk.
5. Aid in clearing obstructions.
6. Assists with evacuation of damaged vehicles.
7. Requests additional MP support, (requests emergency vehicles and fire and ambulance).
8. Secures and protects evidence by cordoning off area.
9. Identifies and secures statements from drivers and witnesses.
10. Measures and records skid-marks and final position of vehicles.
11. Prepares traffic accident report (DA Form 3946) to include basic sketch of scene.
12. Reestablished normal flow of traffic after accident scene has been cleared of vehicles and debris.

PERFORMANCE SCORE (1-7):

ENVIRONMENT SCORE (0-3):

OBSERVER:

EVENT SHEET NUMBER:

Data collector - signature

[illegible]

11 Aug 77

**PT 5167f**

**ARI - REFORGER 77 ENLISTED QUESTIONNAIRE**  
**FORM A**

**PT 5168a**

A-6

**DATA REQUIRED BY THE PRIVACY ACT OF 1974**

(5 U.S.C. 552a)

<b>TITLE OF FORM</b> ARI - REFORGER 77 ENLISTED QUESTIONNAIRE - FORM A		<b>PRESCRIBING DIRECTIVE</b> AR 70-1
<b>1 AUTHORITY</b>  10 USC Sec 4503		
<b>2 PRINCIPAL PURPOSE(S)</b>  The data collected with the attached form are to be used for research purposes only.		
<b>3 ROUTINE USES</b>  This is an experimental personnel data collection form developed by the U.S. Army Research Institute for the Behavioral and Social Sciences pursuant to its research mission as prescribed in AR 70-1. When identifiers (name or Social Security Number) are requested they are to be used for administrative and statistical control purposes only. Full confidentiality of the responses will be maintained in the processing of these data.		
<b>4 MANDATORY OR VOLUNTARY DISCLOSURE AND EFFECT ON INDIVIDUAL NOT PROVIDING INFORMATION</b>  Your participation in this research is strictly voluntary. Individuals are encouraged to provide complete and accurate information in the interests of the research, but there will be no effect on individuals for not providing all or any part of the information. This notice may be detached from the rest of the form and retained by the individual if so desired.		

**FORM**

**Privacy Act Statement - 28 Sep 75**

DA Form 4368-R, 1 May 75

ARI - REFORGER 77  
ENLISTED QUESTIONNAIRE - FORM A

Instructions

The Department of the Army is conducting research on Women in the Army. One aspect of the research concerns attitudes toward women in the Army and women soldiers in a field situation such as REFORGER 77.

The purpose of this questionnaire is to get your opinions on this subject. Your answers will be used for research purposes only and will not be associated with you individually. The purpose of asking personal questions, such as the amount of education you have, is to find out how different groups of soldiers answer the opinion questions.

Most questions provide you with a list of possible answers. Please check your answer in the space provided.

Example:

1. Are you stationed at Fort Riley?

  ✓   1) Yes  
      2) No

Some questions require you to write your answer in the space provided. All questions should be answered directly on the questionnaire. Feel free to write comments about any of your answers in the margins or other spaces.

Thank you for filling out the questionnaire.

1. Are you going on REFORGER?

- ☐ 1) Yes.
- ☐ 2) Maybe. Am deployable, but have been told I'm on "standby."
- ☐ 3) Probably not. Am deployable, but have been told I'm not going.
- ☐ 4) No. I am nondeployable.

2. Do you think the deployment decision in your case was fair; that is, was it the same for you as for others like you?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

3. How much do you want to go on REFORGER?

- ☐ 1) Would do almost anything to avoid going.
- ☐ 2) Would make an effort to avoid going.
- ☐ 3) Would prefer not to go, but wouldn't make an effort to avoid going.
- ☐ 4) No opinion - Don't care at all.
- ☐ 5) Would prefer to go, but wouldn't make an effort to go.
- ☐ 6) Would make an effort to go.
- ☐ 7) Would do almost anything to go.

4. If you don't want to go on REFORGER, why not? (If you want to go, skip this question.)

- ☐ 1) Medical problem
- ☐ 2) Pregnant wife
- ☐ 3) Family problem
- ☐ 4) Financial problem
- ☐ 5) Legal problem
- ☐ 6) Part-time job
- ☐ 7) Personal relationships (other than family)
- ☐ 8) Problems with personal property
- ☐ 9) Don't like Army
- ☐ 10) Don't like REFORGER 77
- ☐ 11) Other (Specify: \_\_\_\_\_)

5. Do you think that decisions about sending women and men on REFORGER were made on the same basis?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know



IF YOU ARE "NONDEPLOYABLE" (YOU CHECKED #4 ON QUESTION #1), SKIP TO QUESTION #25.

6. For purposes of this questionnaire, we would like to define, for you, a group called an "EVERYDAY WORK GROUP." Your "EVERYDAY WORK GROUP" will be that group of about 10 - 20 enlisted soldiers with whom you will most closely associate during the day while on REFORGER.

What is the size of your "EVERYDAY WORK GROUP?"

- ☐ 1) 9 soldiers or fewer
- ☐ 2) 10 - 13 soldiers
- ☐ 3) 14 - 17 soldiers
- ☐ 4) 18 - 20 soldiers
- ☐ 5) 21 soldiers or more

7. Your "EVERYDAY WORK GROUP" can best be described as a:

- ☐ 1) squad
- ☐ 2) section
- ☐ 3) platoon
- ☐ 4) other (Title: \_\_\_\_\_)

8. Exactly how many enlisted soldiers (men and women) are in your "EVERYDAY WORK GROUP" for REFORGER? \_\_\_\_\_

9. How many of the enlisted soldiers in your "EVERYDAY WORK GROUP" for REFORGER are women? \_\_\_\_\_

10. In general, how good a job do you think your "EVERYDAY WORK GROUP" will do on REFORGER?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

11. Think about the number of enlisted women in your "EVERYDAY WORK GROUP" for REFORGER. Which of the following is true? Choose one.

There are no enlisted women  
in my "EVERYDAY WORK GROUP."  
If we had some enlisted women,  
we would do:

There is(are) an enlisted woman  
(enlisted women) in my "EVERYDAY  
WORK GROUP". If we had more  
enlisted women, we would do:

- ☐ 1) a better job.  
☐ 2) no differently.  
☐ 3) a worse job.

- ☐ 4) a better job.  
☐ 5) no differently.  
☐ 6) a worse job.

12. How would you rate the training readiness of your "EVERYDAY WORK GROUP" for REFORGER?

- ☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

13. How would you rate your own training readiness for REFORGER?

- ☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor

14. How do you think the morale of the enlisted soldiers in your "EVERYDAY WORK GROUP" will be during REFORGER?

- ☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor

15. How well do you think the enlisted men in your "EVERYDAY WORK GROUP" will do their jobs during REFORGER? (Jobs other than unit defense and housekeeping jobs.)

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor
- ☐ 6) Don't know

16. How well do you think the enlisted women in your "EVERYDAY WORK GROUP" will do their jobs during REFORGER? (Jobs other than unit defense and housekeeping jobs.)

- ☐ 0) There are no enlisted women in my "EVERYDAY WORK GROUP."
- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor
- ☐ 6) Don't know

17. How well do you think the enlisted men in your "EVERYDAY WORK GROUP" will do their unit defense and housekeeping jobs during REFORGER? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor
- ☐ 6) Don't know

18. How well do you think the enlisted women in your "EVERYDAY WORK GROUP" will do their unit defense and housekeeping jobs during REFORGER? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

- ☐ 0) There are no enlisted women in my "EVERYDAY WORK GROUP."
- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor
- ☐ 6) Don't know

19. How well do you think the enlisted men in your COMPANY will do their jobs during REFORGER? (Jobs other than unit defense and housekeeping jobs.)

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor
- ☐ 6) Don't know

20. How well do you think the enlisted women in your COMPANY will do their jobs during REFORGER? (Jobs other than unit defense and housekeeping jobs.)

- ☐ 0) There are no women in my company.
- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor
- ☐ 6) Don't know

21. How well do you think the enlisted men in your COMPANY will do their unit defense and housekeeping jobs during REFORGER? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor
- ☐ 6) Don't know

22. How well do you think the enlisted women in your COMPANY will do their unit defense and housekeeping jobs during REFORGER? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

- ☐ 0) There are no enlisted women in my company.
- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor
- ☐ 6) Don't know

23. How well do you think you yourself will do your jobs during REFORGER?  
(Jobs other than unit defense and housekeeping jobs.)

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor
- ☐ 6) Don't know

24. How well do you think you yourself will do your unit defense and housekeeping jobs during REFORGER? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor
- ☐ 6) Don't know

25. Since you first came into the Army, approximately how many unit training exercises of different types have you taken part in?  
(For example, ARTEP's, ATT's, CPX's, ORTT's, FTX's)

- ☐ 1) One
- ☐ 2) Two or Three
- ☐ 3) Four or Five
- ☐ 4) Six or more (How many? \_\_\_\_\_)

26. During the past year, how often have you worked with enlisted women soldiers?

- ☐ 1) Never
- ☐ 2) About once during the year
- ☐ 3) About once every six months
- ☐ 4) About once a month
- ☐ 5) About once a week
- ☐ 6) About once a day
- ☐ 7) Every day, all day long

27. Have you, for any period of time during the past year, had a woman as your immediate supervisor? If yes, for about how long?

- ☐ 1) Yes; \_\_\_\_\_ month(s) \_\_\_\_\_ week(s)
- ☐ 2) No

28. During the past year, did you ever help an enlisted man with an on-the-job task even though you were not required to help him?

- ☐ 0) No
- ☐ 1) Yes - once
- ☐ 2) Yes - two or three times
- ☐ 3) Yes - four or five times
- ☐ 4) Yes - six or more times

29. During the past year, did an enlisted man (not your supervisor) ask you to help him with some on-the-job task you weren't required to help him with?

- ☐ 0) No
- ☐ 1) Yes - once
- ☐ 2) Yes - two or three times
- ☐ 3) Yes - four or five times
- ☐ 4) Yes - six or more times

30. If you were ever asked for on-the-job help by an enlisted man, what did you do?

- ☐ 0) No man asked me for help.
- ☐ 1) I always gave the help.
- ☐ 2) Sometimes I gave the help and sometimes I didn't.
- ☐ 3) I didn't give the help.

31. During the past year, did you ever help an enlisted woman with an on-the-job task even though you were not required to help her?

- ☐ 0) No
- ☐ 1) Yes - once
- ☐ 2) Yes - two or three times
- ☐ 3) Yes - four or five times
- ☐ 4) Yes - six or more times

32. During the past year, did an enlisted woman (not your supervisor) ask you to help her with some on-the-job task you weren't required to help her with?

- ☐ 0) No
- ☐ 1) Yes - once
- ☐ 2) Yes - two or three times
- ☐ 3) Yes - four or five times
- ☐ 4) Yes - six or more times

33. If you were ever asked for on-the-job help by an enlisted woman, what did you do?

- ☐ 0) No woman asked me for help.
- ☐ 1) I always gave the help.
- ☐ 2) Sometimes I gave the help and sometimes I didn't.
- ☐ 3) I didn't give the help.

34. How would you rate the leadership of your company officers during the past year?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

35. How would you rate the leadership of your company NCO's during the past year?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

36. In general, do the male NCO's in your company treat men and women enlisted soldiers differently?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

37. In what ways do male NCO's treat men and women enlisted soldiers differently? (Skip to the next question, if you answered "No" or "Don't know" to question #36.)

- ☐ 1) More privileges for women
- ☐ 2) Assignment of easier tasks to women
- ☐ 3) More on-the-job help for women
- ☐ 4) More attention to personal problems of women
- ☐ 5) More obscene language around men
- ☐ 6) Harsher discipline for men
- ☐ 7) More discipline for men
- ☐ 8) Other (Specify: \_\_\_\_\_)

38. In general, do male officers in your company treat men and women enlisted soldiers differently?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

39. In what ways do male officers treat men and women enlisted soldiers differently? (Skip to the next question, if you answered "No" or "Don't know" to question #38.)

- ☐ 1) More privileges for women
- ☐ 2) Assignment of easier tasks to women
- ☐ 3) More on-the-job help for women
- ☐ 4) More attention to personal problems of women
- ☐ 5) More obscene language around men
- ☐ 6) Harsher discipline for men
- ☐ 7) More discipline for men
- ☐ 8) Other (Specify: \_\_\_\_\_)

40. What do you think of REFORGER (being in the field over a long period of time) as a way of finding out how the US Army can perform in a wartime mission?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

41. What do you think of REFORGER (being in the field over a long period of time) as a way of finding out how units with women can perform in a wartime mission?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

42. If women were allowed to go into combat, what do you think most enlisted women in your company would do about going into combat in a wartime situation?

- ☐ 0) There are no women in my company.
- ☐ 1) They would do almost anything to get to go.
- ☐ 2) They would want to go, but wouldn't do anything to get to go.
- ☐ 3) They wouldn't care one way or the other whether they go.
- ☐ 4) They wouldn't want to go, but wouldn't try to get out of going.
- ☐ 5) They would do almost anything to keep from going.



43. What do you think most enlisted men in your company would do about going into combat in a wartime situation?
- ☐ 1) They would do almost anything to go.
  - ☐ 2) They would want to go, but wouldn't do anything to get to go.
  - ☐ 3) They wouldn't care one way or the other whether they go.
  - ☐ 4) They wouldn't want to go, but wouldn't try to get out of going.
  - ☐ 5) They would do almost anything to keep from going.
44. What do you think you yourself would do about going into combat in a wartime situation?
- ☐ 1) I would do almost anything to get to go.
  - ☐ 2) I would want to go, but wouldn't do anything to get to go.
  - ☐ 3) I wouldn't care one way or the other whether I go.
  - ☐ 4) I wouldn't want to go, but wouldn't try to get out of going.
  - ☐ 5) I would do almost anything to keep from going.
45. Whom would you rather depend on to help you get a job done on post?
- ☐ 1) a woman
  - ☐ 2) a man
  - ☐ 3) either
46. Whom would you rather depend on to help you get a job done on REFORGER?
- ☐ 1) a woman
  - ☐ 2) a man
  - ☐ 3) either
47. If women were allowed to go into combat, whom would you rather depend on to help you get a job done in combat?
- ☐ 1) a woman
  - ☐ 2) a man
  - ☐ 3) either
48. If women were allowed to go into combat and if you were in a tough situation during combat, whom would you rather depend on to help you get out of it?
- ☐ 1) a woman
  - ☐ 2) a man
  - ☐ 3) either

49. Who have a better chance of getting time off for personal problems?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

50. Who go on sick call more often?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

51. During a normal work week, who work the most hours?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

52. Do enlisted women try to get out of work by getting pregnant?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

Here are some statements others have made about women. How do you feel about them?

53. Women NCO's will not get much respect from the men in their units.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

54. Women would make just as good frontline soldiers as men if they were given the same kind of training.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

55. If women were assigned to combat jobs, the Army would:

- ☐ 1) become more effective.
- ☐ 2) remain just as effective.
- ☐ 3) become less effective.

56. Women don't make good bosses at work.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

57. Women should be included in space missions.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

58. The Army's mission is best carried out:

- ☐ 1) by men only.
- ☐ 2) mostly by men with some women in support roles.
- ☐ 3) mostly by men with some women in combat as well as support roles.
- ☐ 4) equally by men and women
- ☐ 5) mostly by women.

59. If a greater number of women were placed in command positions, the effectiveness of the Army:

- ☐ 1) would increase.
- ☐ 2) would decrease.
- ☐ 3) would not change.

60. Women commanders will not get much respect from the men in their units.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

Background Information

61. What is your sex?

- ☐ 1) Male
- ☐ 2) Female

62. How old were you on your last birthday?

years old

63. What is your present marital status?

- ☐ 1) Married
- ☐ 2) Engaged
- ☐ 3) Legally separated
- ☐ 4) Never been married
- ☐ 5) Divorced or marriage annulled; not remarried
- ☐ 6) Widowed

64. Is your spouse an active duty member of the Armed Forces?

- ☐ 1) I'm not married
- ☐ 2) Yes - U.S. Army
- ☐ 3) Yes - other service
- ☐ 4) No

65. How many children do you have?

- ☐ 1) None
- ☐ 2) One
- ☐ 3) Two
- ☐ 4) Three or more

66. How many children are living in your home now?

- ☐ 1) None
- ☐ 2) One
- ☐ 3) Two
- ☐ 4) Three or more

67. What is your present paygrade?

- ☐ 1) E1
- ☐ 2) E2
- ☐ 3) E3
- ☐ 4) E4
- ☐ 5) E5

- ☐ 6) E6
- ☐ 7) E7
- ☐ 8) E8
- ☐ 9) E9

68. What is your primary MOS?

Primary MOS name: \_\_\_\_\_

MOS code: \_\_\_\_\_

69. What is your secondary MOS?

Secondary MOS name: \_\_\_\_\_

MOS code: \_\_\_\_\_

70. What is your duty MOS?

Duty MOS name: \_\_\_\_\_

MOS code: \_\_\_\_\_

71. In what MOS do you work most of the time?

- ☐ 1) My Primary MOS
- ☐ 2) My Secondary MOS
- ☐ 3) My Duty MOS
- ☐ 4) Other:

MOS name: \_\_\_\_\_

MOS code: \_\_\_\_\_

72. You are serving in which of the following:

- ☐ 1) First enlistment
- ☐ 2) Re-enlistment

73. What is the highest educational diploma or degree you have received?

- ☐ 1) No high school diploma or G.E.D.
- ☐ 2) G.E.D.
- ☐ 3) High school diploma
- ☐ 4) Associate's degree
- ☐ 5) Bachelor's degree
- ☐ 6) Graduate or professional degree

74. During the last month, how many times did you go on sick call?

- ☐ 0) Not at all
- ☐ 1) Once
- ☐ 2) Twice
- ☐ 3) Three or more times

75. In general, what sort of physical condition would you say you're in at the present time?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

76. Do you consider yourself an athletic person?

- ☐ 1) Yes
- ☐ 2) No

77. When you were 13 to 17 years old, how often did you take part in physical activities such as football, tennis, backpacking, etc.?

- ☐ 1) Very often
- ☐ 2) Often
- ☐ 3) Occasionally
- ☐ 4) Not very often
- ☐ 5) Almost never or never

78. As close as you can remember, what is your AFQT score? If you don't remember, what category are you in?

- ☐ 1) AFQT score: \_\_\_\_\_
- ☐ 2) Category: \_\_\_\_\_
- ☐ 3) Don't know

79. How tall are you?

\_\_\_\_\_feet and \_\_\_\_\_inches

80. How much do you weigh?

\_\_\_\_\_pounds

81. What unit will you be with during REFORGER?

121st Signal Battalion

- \_\_\_ 1) Headquarters and Headquarters Company
- \_\_\_ 2) Company A
- \_\_\_ 3) Company B
- \_\_\_ 4) Company C

1st Medical Battalion

- \_\_\_ 5) Headquarters and A Company
- \_\_\_ 6) Company C

1st S&T Battalion

- \_\_\_ 7) Headquarters and Headquarters Company
- \_\_\_ 8) Company A
- \_\_\_ 9) Company B

701st Maintenance Battalion

- \_\_\_ 10) Headquarters and Light Company
- \_\_\_ 11) Company B
- \_\_\_ 12) Company D

385th Military Police Battalion

- \_\_\_ 13) Headquarters and Headquarters Detachment
- \_\_\_ 14) Company A
- \_\_\_ 15) Company B
- \_\_\_ 16) Company C

793rd Military Police Battalion

- \_\_\_ 17) Headquarters and Headquarters Detachment
- \_\_\_ 18) Company A
- \_\_\_ 19) Company B
- \_\_\_ 20) Company C

Other Military Police Units

- \_\_\_ 21) 1st MP Company
- \_\_\_ 22) 1st MP Forward
- \_\_\_ 23) 3rd MP Company
- \_\_\_ 24) Platoon, 4th MP Company
- \_\_\_ 25) 110th MP Platoon
- \_\_\_ 26) 545th MP Platoon

82. When did you join this unit?

\_\_\_ (year)

\_\_\_ (month)

83. How many years and months of Army service do you have?

\_\_\_ years

\_\_\_ months

84. How do you feel about staying in the Army?

- \_\_\_ 1) Want to stay until I retire.
- \_\_\_ 2) Want to re-enlist at least one more time.
- \_\_\_ 3) Want to leave the Army when my current enlistment is up.
- \_\_\_ 4) Would get out today if I could.
- \_\_\_ 5) Undecided, not sure.

**ARI - REFORGER 77 ENLISTED QUESTIONNAIRE**  
**FORM B**

**PT 5168b**



**DATA REQUIRED BY THE PRIVACY ACT OF 1974**

(5 U.S.C. 552a)

<b>TITLE OF FORM</b>		<b>PRESCRIBING DIRECTIVE</b>
ARI - REFORGER 77 ENLISTED QUESTIONNAIRE- FORM B		AR 70-1
<b>1. AUTHORITY</b>		
10 USC Sec 4503		
<b>2. PRINCIPAL PURPOSE(S)</b>		
The data collected with the attached form are to be used for research purposes only.		
<b>3. ROUTINE USES</b>		
This is an experimental personnel data collection form developed by the U.S. Army Research Institute for the Behavioral and Social Sciences pursuant to its research mission as prescribed in AR 70-1. When identifiers (name or Social Security Number) are requested, they are to be used for administrative and statistical control purposes only. Full confidentiality of the responses will be maintained in the processing of these data.		
<b>4. MANDATORY OR VOLUNTARY DISCLOSURE AND EFFECT ON INDIVIDUAL NOT PROVIDING INFORMATION</b>		
Your participation in this research is strictly voluntary. Individuals are encouraged to provide complete and accurate information in the interests of the research, but there will be no effect on individuals for not providing all or any part of the information. This notice may be detached from the rest of the form and retained by the individual if so desired.		

FORM

Privacy Act Statement - 28 Sep 75

DA Form 4368-R, 1 May 75

ARI - REFORGER 77  
ENLISTED QUESTIONNAIRE - FORM B

Instructions

The Department of the Army is conducting research on Women in the Army. One aspect of the research concerns attitudes toward women in the Army and women soldiers in a field situation such as REFORGER 77.

Most of you helped in this research effort before you went on REFORGER. This questionnaire is similar to the one you filled out then. Your answers will be used for research purposes only and will not be associated with you individually. The purpose of asking personal questions, such as the amount of education you have, is to find out how different groups of soldiers answer the opinion questions.

Most questions provide you with a list of possible answers. Please check your answer in the space provided.

Example:

1. Did you participate in REFORGER 77?

☒ 1) Yes  
☐ 2) No

Some questions require you to write your answer in the space provided. All questions should be answered directly on the questionnaire. Feel free to write comments about any of your answers in the margins or other spaces.

Check only one answer, your best answer to the question, unless the instructions tell you to check as many as apply.

Thank you for filling out the questionnaire.

All questions about REFORGER refer to REFORGER 77.

1. How long were you on REFORGER?

- ☐ 1) Entire time
- ☐ 2) Missed one day
- ☐ 3) Missed two or three days
- ☐ 4) Missed four or more days
- ☐ 5) Didn't go on REFORGER

2. Do you think the decision to deploy you on REFORGER was fair; that is, was it the same for you as for others like you?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

3. How much did you want to go on REFORGER?

- ☐ 1) Would have done almost anything to avoid going.
- ☐ 2) Made an effort to avoid going.
- ☐ 3) Would have preferred not to go, but didn't make an effort to avoid going.
- ☐ 4) No opinion - Don't care at all.
- ☐ 5) Preferred to go, but didn't make an effort to go.
- ☐ 6) Made an effort to go.
- ☐ 7) Would have done almost anything to go.

4. Do you think that decisions about sending women and men on REFORGER were made on the same basis?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

5. For purposes of this questionnaire, we would like to define, for you, a group called an "EVERYDAY WORK GROUP." Your "EVERYDAY WORK GROUP" was that group of about 10 - 20 enlisted soldiers with whom you most closely associated during the day while on REFORGER.

What was the size of your "EVERYDAY WORK GROUP?"

- ☐ 1) 9 soldiers or fewer
- ☐ 2) 10 - 13 soldiers
- ☐ 3) 14 - 17 soldiers
- ☐ 4) 18 - 20 soldiers
- ☐ 5) 21 soldiers or more

6. Your "EVERYDAY WORK GROUP" can best be described as a:

- ☐ 1) squad
- ☐ 2) section
- ☐ 3) platoon
- ☐ 4) other (Title: \_\_\_\_\_)

7. Exactly how many enlisted soldiers (men and women) were in your "EVERYDAY WORK GROUP" during REFORGER? \_\_\_\_\_

8. How many of the enlisted soldiers in your "EVERYDAY WORK GROUP" for REFORGER were women? \_\_\_\_\_

9. In general, how good a job do you think your "EVERYDAY WORK GROUP" did on REFORGER?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

10. Think about the number of enlisted women in your "EVERYDAY WORK GROUP" for REFORGER. Which of the following is true? Choose one.

There were no enlisted women in my "EVERYDAY WORK GROUP." If we had had some enlisted women, we would have done:

- ☐ 1) a better job.
- ☐ 2) no differently.
- ☐ 3) a worse job.

There was(were) an enlisted woman (enlisted women) in my "EVERYDAY WORK GROUP". If we had had more enlisted women, we would had done:

- ☐ 4) a better job.
- ☐ 5) no differently.
- ☐ 6) a worse job.

11. How would you rate the training readiness of your "EVERYDAY WORK GROUP" for REFORGER?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor
- ☐ 6) Don't know

12. How would you rate your own training readiness for REFORGER?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

13. How do you think the morale of the enlisted soldiers in your "EVERYDAY WORK GROUP" was during REFORGER?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

14. How well do you think the enlisted men in your "EVERYDAY WORK GROUP" did their jobs during REFORGER? (Jobs other than unit defense and housekeeping jobs.)

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor
- ☐ 6) Don't know

15. How well do you think the enlisted women in your "EVERYDAY WORK GROUP" did their jobs during REFORGER? (Jobs other than unit defense and housekeeping jobs.)

- ☐ 0) There were no enlisted women in my "EVERYDAY WORK GROUP."
- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor
- ☐ 6) Don't know

16. How well do you think the enlisted men in your "EVERYDAY WORK GROUP" did their unit defense and housekeeping jobs during REFORGER? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

17. How well do you think the enlisted women in your "EVERYDAY WORK GROUP" did their unit defense and housekeeping jobs during REFORGER? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

☐ 0) There were no enlisted women in my "EVERYDAY WORK GROUP."  
☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

18. How well do you think the enlisted men in your COMPANY did their jobs during REFORGER? (Jobs other than unit defense and housekeeping jobs.)

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

19. How well do you think the enlisted women in your COMPANY did their jobs during REFORGER? (Jobs other than unit defense and housekeeping jobs.)

☐ 0) There were no women in my company.  
☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

20. How well do you think the enlisted men in your COMPANY did their unit defense and housekeeping jobs during REFORGER? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

\_\_\_\_ 1) Excellent  
\_\_\_\_ 2) Good  
\_\_\_\_ 3) Fair  
\_\_\_\_ 4) Poor  
\_\_\_\_ 5) Very poor  
\_\_\_\_ 6) Don't know

21. How well do you think the enlisted women in your COMPANY did their unit defense and housekeeping jobs during REFORGER? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

\_\_\_\_ 0) There were no enlisted women in my company.  
\_\_\_\_ 1) Excellent  
\_\_\_\_ 2) Good  
\_\_\_\_ 3) Fair  
\_\_\_\_ 4) Poor  
\_\_\_\_ 5) Very poor  
\_\_\_\_ 6) Don't know

22. How well do you think you yourself did your jobs during REFORGER? (Jobs other than unit defense and housekeeping jobs.)

\_\_\_\_ 1) Excellent  
\_\_\_\_ 2) Good  
\_\_\_\_ 3) Fair  
\_\_\_\_ 4) Poor  
\_\_\_\_ 5) Very poor  
\_\_\_\_ 6) Don't know

23. How well do you think you yourself did your unit defense and housekeeping jobs during REFORGER? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

\_\_\_\_ 1) Excellent  
\_\_\_\_ 2) Good  
\_\_\_\_ 3) Fair  
\_\_\_\_ 4) Poor  
\_\_\_\_ 5) Very poor  
\_\_\_\_ 6) Don't know

24. Since you first came into the Army, approximately how many unit training exercises of different types have you taken part in? (For example, ARTEP's, ATT's, CPX's, ORTT's, FTX's, including REFORGER.)

- ☐ 0) None
- ☐ 1) One
- ☐ 2) Two or Three
- ☐ 3) Four or Five
- ☐ 4) Six or more (How many? \_\_\_\_\_)

25. During the past year, how often have you worked with enlisted women soldiers?

- ☐ 1) Never
- ☐ 2) About once during the year
- ☐ 3) About once every six months
- ☐ 4) About once a month
- ☐ 5) About once a week
- ☐ 6) About once a day
- ☐ 7) Every day, all day long

26. Did you, for any period of time during REFORGER, have a woman as your immediate supervisor? If yes, for about how long?

- ☐ 1) Yes; \_\_\_\_\_ day(s)
- ☐ 2) No

27. During REFORGER, did you ever help an enlisted man with an on-the-job task even though you were not required to help him?

- ☐ 0) No
- ☐ 1) Yes - once
- ☐ 2) Yes - two or three times
- ☐ 3) Yes - four or five times
- ☐ 4) Yes - six or more times

28. During REFORGER, did an enlisted man (not your supervisor) ask you to help him with some on-the-job task you weren't required to help him with?

- ☐ 0) No
- ☐ 1) Yes - once
- ☐ 2) Yes - two or three times
- ☐ 3) Yes - four or five times
- ☐ 4) Yes - six or more times



29. If you were ever asked for on-the-job help by an enlisted man, what did you do?

- ☐ 0) No man asked me for help.
- ☐ 1) I always gave the help.
- ☐ 2) Sometimes I gave the help and sometimes I didn't.
- ☐ 3) I didn't give the help.

30. During REFORGER, did you ever help an enlisted woman with an on-the-job task even though you were not required to help her?

- ☐ 0) No
- ☐ 1) Yes - once
- ☐ 2) Yes - two or three times
- ☐ 3) Yes - four or five times
- ☐ 4) Yes - six or more times

31. During REFORGER, did an enlisted woman (not your supervisor) ask you to help her with some on-the-job task you weren't required to help her with?

- ☐ 0) No
- ☐ 1) Yes - once
- ☐ 2) Yes - two or three times
- ☐ 3) Yes - four or five times
- ☐ 4) Yes - six or more times

32. If you were ever asked for on-the-job help by an enlisted woman, what did you do?

- ☐ 0) No woman asked me for help.
- ☐ 1) I always gave the help.
- ☐ 2) Sometimes I gave the help and sometimes I didn't.
- ☐ 3) I didn't give the help.

33. How would you rate the leadership of your company officers during REFORGER?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

34. How would you rate the leadership of your company NCO's during REFORGER?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

35. In general, did the male NCO's in your company treat men and women enlisted soldiers differently during REFORGER?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

36. In what ways did male NCO's treat men and women enlisted soldiers differently? (Skip to the next question, if you answered "No" or "Don't know" to question #35.) Check as many as apply.

- ☐ 1) More privileges for women
- ☐ 2) Assignment of easier tasks to women
- ☐ 3) More on-the-job help for women
- ☐ 4) More attention to personal problems of women
- ☐ 5) More obscene language around men
- ☐ 6) Harsher discipline for men
- ☐ 7) More discipline for men
- ☐ 8) Other (Specify: \_\_\_\_\_)

37. In general, did male officers in your company treat men and women enlisted soldiers differently during REFORGER?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

38. In what ways did male officers treat men and women enlisted soldiers differently? (Skip to the next question, if you answered "No" or "Don't know" to question #37.) Check as many as apply.

- ☐ 1) More privileges for women
- ☐ 2) Assignment of easier tasks to women
- ☐ 3) More on-the-job help for women
- ☐ 4) More attention to personal problems of women
- ☐ 5) More obscene language around men
- ☐ 6) Harsher discipline for men
- ☐ 7) More discipline for men
- ☐ 8) Other (Specify: \_\_\_\_\_)

39. What do you think of REFORGER (being in the field over a long period of time) as a way of finding out how the US Army can perform in a wartime mission?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

40. What do you think of REFORGER (being in the field over a long period of time) as a way of finding out how units with women can perform in a wartime mission?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

41. If women were allowed to go into combat, what do you think most enlisted women in your company would do about going into combat in a wartime situation?

- ☐ 0) There are no women in my company.
- ☐ 1) They would do almost anything to get to go.
- ☐ 2) They would want to go, but wouldn't do anything to get to go.
- ☐ 3) They wouldn't care one way or the other whether they go.
- ☐ 4) They wouldn't want to go, but wouldn't try to get out of going.
- ☐ 5) They would do almost anything to keep from going.

42. What do you think most enlisted men in your company would do about going into combat in a wartime situation?
- ☐ 1) They would do almost anything to go.
  - ☐ 2) They would want to go, but wouldn't do anything to get to go.
  - ☐ 3) They wouldn't care one way or the other whether they go.
  - ☐ 4) They wouldn't want to go, but wouldn't try to get out of going.
  - ☐ 5) They would do almost anything to keep from going.
43. What do you think you yourself would do about going into combat in a wartime situation?
- ☐ 1) I would do almost anything to get to go.
  - ☐ 2) I would want to go, but wouldn't do anything to get to go.
  - ☐ 3) I wouldn't care one way or the other whether I go.
  - ☐ 4) I wouldn't want to go, but wouldn't try to get out of going.
  - ☐ 5) I would do almost anything to keep from going.
44. Whom would you rather depend on to help you get a job done on post?
- ☐ 1) a woman
  - ☐ 2) a man
  - ☐ 3) either
45. Whom would you rather have depended on to help you get a job done on REFORGER?
- ☐ 1) a woman
  - ☐ 2) a man
  - ☐ 3) either
46. If women were allowed to go into combat, whom would you rather depend on to help you get a job done in combat?
- ☐ 1) a woman
  - ☐ 2) a man
  - ☐ 3) either
47. If women were allowed to go into combat and if you were in a tough situation during combat, whom would you rather depend on to help you get out of it?
- ☐ 1) a woman
  - ☐ 2) a man
  - ☐ 3) either

48. During REFORGER, who had a better chance of getting time off for personal problems?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

49. During REFORGER, who went on sick call more often?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

50. During REFORGER, who worked the most hours?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

Here are some statements others have made about women. How do you feel about them?

51. Women NCO's will not get much respect from the men in their units.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

52. Women would make just as good frontline soldiers as men if they were given the same kind of training.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

53. If women were assigned to combat jobs, the Army would:

- ☐ 1) become more effective.
- ☐ 2) remain just as effective.
- ☐ 3) become less effective.

54. Women don't make good bosses at work.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

55. Women should be included in space missions.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

56. The Army's mission is best carried out:

- ☐ 1) by men only.
- ☐ 2) mostly by men with some women in support roles.
- ☐ 3) mostly by men with some women in combat as well as support roles.
- ☐ 4) equally by men and women
- ☐ 5) mostly by women.

57. If a greater number of women were placed in command positions, the effectiveness of the Army:

- ☐ 1) would increase.
- ☐ 2) would decrease.
- ☐ 3) would not change.

58. Women commanders will not get much respect from the men in their units.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

Background Information

59. What is your sex?

- ☐ 1) Male
- ☐ 2) Female

60. How old were you on your last birthday?

years old

61. What is your present marital status?

- ☐ 1) Married
- ☐ 2) Engaged
- ☐ 3) Legally separated
- ☐ 4) Never been married
- ☐ 5) Divorced or marriage annulled; not remarried
- ☐ 6) Widowed

62. Is your spouse an active duty member of the Armed Forces?

- ☐ 1) I'm not married
- ☐ 2) Yes - U.S. Army
- ☐ 3) Yes - other service
- ☐ 4) No

63. How many children do you have?

- ☐ 1) None
- ☐ 2) One
- ☐ 3) Two
- ☐ 4) Three or more

64. How many children are living in your home now?

- ☐ 1) None
- ☐ 2) One
- ☐ 3) Two
- ☐ 4) Three or more

72. During the last month, how many times did you go on sick call?

- ☐ 0) Not at all
- ☐ 1) Once
- ☐ 2) Twice
- ☐ 3) Three or more times

73. In general, what sort of physical condition would you say you're in at the present time?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

74. Do you consider yourself an athletic person?

- ☐ 1) Yes
- ☐ 2) No

75. When you were 13 to 17 years old, how often did you take part in physical activities such as football, tennis, backpacking, etc.?

- ☐ 1) Very often
- ☐ 2) Often
- ☐ 3) Occasionally
- ☐ 4) Not very often
- ☐ 5) Almost never or never

76. As close as you can remember, what is your AFQT score? If you don't remember, what category are you in?

- 1) AFQT score: \_\_\_\_\_
- 2) Category: \_\_\_\_\_
- ☐ 3) Don't know
- ☐ 4) GT score: \_\_\_\_\_

77. How tall are you?

\_\_\_\_\_ feet and \_\_\_\_\_ inches

78. How much do you weigh?

\_\_\_\_\_ pounds



65. What is your present paygrade?

- ☐ 1) E1
- ☐ 2) E2
- ☐ 3) E3
- ☐ 4) E4
- ☐ 5) E5

- ☐ 6) E6
- ☐ 7) E7
- ☐ 8) E8
- ☐ 9) E9

66. What is your primary MOS?

Primary MOS name: \_\_\_\_\_

MOS code: \_\_\_\_\_

67. What is your secondary MOS?

Secondary MOS name: \_\_\_\_\_

MOS code: \_\_\_\_\_

68. What is your duty MOS?

Duty MOS name: \_\_\_\_\_

MOS code: \_\_\_\_\_

69. In what MOS did you work most of the time during REFORGER?

- ☐ 1) My Primary MOS
- ☐ 2) My Secondary MOS
- ☐ 3) My Duty MOS
- ☐ 4) Other:

MOS name: \_\_\_\_\_

MOS code: \_\_\_\_\_

70. You are serving in which of the following:

- ☐ 1) First enlistment
- ☐ 2) Re-enlistment

71. What is the highest educational diploma or degree you have received?

- ☐ 1) No high school diploma or G.E.D
- ☐ 2) G.E.D.
- ☐ 3) High school diploma
- ☐ 4) Associate's degree
- ☐ 5) Bachelor's degree
- ☐ 6) Graduate or professional degree

79. What unit were you with during REFORGER?

121st Signal Battalion

- \_\_\_ 1) Headquarters and  
Headquarters Company
- \_\_\_ 2) Company A
- \_\_\_ 3) Company B
- \_\_\_ 4) Company C

1st Medical Battalion

- \_\_\_ 5) Headquarters and  
A Company
- \_\_\_ 6) Company C

1st S&T Battalion

- \_\_\_ 7) Headquarters and  
Headquarters Company
- \_\_\_ 8) Company A
- \_\_\_ 9) Company B

701st Maintenance Battalion

- \_\_\_ 10) Headquarters and Light  
Company
- \_\_\_ 11) Company B
- \_\_\_ 12) Company D

385th Military Police Battalion

- \_\_\_ 13) Headquarters and  
Headquarters Detachment
- \_\_\_ 14) Company A
- \_\_\_ 15) Company B
- \_\_\_ 16) Company C

793rd Military Police Battalion

- \_\_\_ 17) Headquarters and  
Headquarters Detachment
- \_\_\_ 18) Company A
- \_\_\_ 19) Company B
- \_\_\_ 20) Company C

Other Military Police Units

- \_\_\_ 21) 1st MP Company
- \_\_\_ 22) 1st MP Forward
- \_\_\_ 23) 3rd MP Company
- \_\_\_ 24) \_\_\_ Platoon, 4th MP Company
- \_\_\_ 25) 110th MP Platoon
- \_\_\_ 26) 545th MP Platoon

3rd S&T Battalion

- \_\_\_ 27) Headquarters and  
Headquarters Company
- \_\_\_ 28) Company A
- \_\_\_ 29) Company B

1st Maintenance Battalion

- \_\_\_ 30) Headquarters and  
Headquarters Company
- \_\_\_ 31) 22nd Maintenance Co
- \_\_\_ 32) 78th Maintenance Co
- \_\_\_ 33) 124th Maintenance Co
- \_\_\_ 34) 586th Maintenance Co

80. When did you join this unit?

\_\_\_\_\_  
(year)

\_\_\_\_\_  
(month)

81. How many years and months of Army service do you have?

\_\_\_\_ years

\_\_\_\_ months

82. How do you feel about staying in the Army?

- \_\_\_\_ 1) Want to stay until I retire.
- \_\_\_\_ 2) Want to re-enlist at least one more time.
- \_\_\_\_ 3) Want to leave the Army when my current enlistment is up.
- \_\_\_\_ 4) Would get out today if I could.
- \_\_\_\_ 5) Undecided, not sure.

83. Did you serve a tour in Vietnam?

- \_\_\_\_ 0) Yes
- \_\_\_\_ 1) No (If "No", do not answer questions 84 and 85)

84. Which of the following experiences, if any, did you have in Vietnam?

- \_\_\_\_ 0) Engaging the enemy in combat
- \_\_\_\_ 1) Providing support to combat units
- \_\_\_\_ 2) Both of these
- \_\_\_\_ 3) Neither of these

85. What kind of unit were you assigned to?

- \_\_\_\_ 0) Combat
- \_\_\_\_ 1) Combat Support
- \_\_\_\_ 2) Combat Service Support
- \_\_\_\_ 3) TDA unit
- \_\_\_\_ 4) More than one of these

**ARI - REFORGER 77 NONCOMMISSIONED  
OFFICERS QUESTIONNAIRE  
FORM A - NCO**

**PT 5168•**

**A-45**

DATA REQUIRED BY THE PRIVACY ACT OF 1974 (5 U.S.C. 552a)	
TITLE OF FORM	ARI - REFORGER 77 NONCOMMISSIONED OFFICER QUESTIONNAIRE - FORM A - NCO
PREScribing DIRECTIVE	AR 70-1
1. AUTHORITY	
10 USC Sec 4503	
2. PRINCIPAL PURPOSE(S)	
The data collected with the attached form are to be used for research purposes only.	
3. ROUTINE USES	
<p>This is an experimental personnel data collection form developed by the U.S. Army Research Institute for the Behavioral and Social Sciences pursuant to its research mission as prescribed in AR 70-1. When identifiers (name or Social Security Number) are requested they are to be used for administrative and statistical control purposes only. Full confidentiality of the responses will be maintained in the processing of these data.</p>	
4. MANDATORY OR VOLUNTARY DISCLOSURE AND EFFECT ON INDIVIDUAL NOT PROVIDING INFORMATION	
<p>Your participation in this research is strictly voluntary. Individuals are encouraged to provide complete and accurate information in the interests of the research, but there will be no effect on individuals for not providing all or any part of the information. This notice may be detached from the rest of the form and retained by the individual if so desired.</p>	

FORM

Privacy Act Statement - 28 Sep 75

DA Form 4368-R, 1 May 75

A-46

ARI - REFORGER 77  
NONCOMMISSIONED OFFICER QUESTIONNAIRE - FORM A - NCO

Instructions

The Department of the Army is conducting research on Women in the Army. One aspect of the research concerns attitudes toward women in the Army and women soldiers in a field situation such as REFORGER 77.

The purpose of this questionnaire is to get your opinions on this subject. Your answers will be used for research purposes only and will not be associated with you individually. The purpose of asking personal questions, such as the amount of education you have, is to find out how different groups of noncommissioned officers answer the opinion questions.

Most questions provide you with a list of possible answers. Please check your answer in the space provided.

Example:

1. Are you stationed at Fort Riley?

☒ 1) Yes  
☐ 2) No

Some questions require you to write your answer in the space provided. All questions should be answered directly on the questionnaire. Feel free to write comments about any of your answers in the margins or other spaces.

Thank you for filling out the questionnaire.

1. Are you going on REFORGER?

- ☐ 1) Yes.
- ☐ 2) Maybe. Am deployable, but have been told I'm on "standby."
- ☐ 3) Probably not. Am deployable, but have been told I'm not going.
- ☐ 4) No. I am nondeployable.

2. Do you think the deployment decision in your case was fair; that is, was it the same for you as for others like you?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

3. How much do you want to go on REFORGER?

- ☐ 1) Would do almost anything to avoid going.
- ☐ 2) Would make an effort to avoid going.
- ☐ 3) Would prefer not to go, but wouldn't make an effort to avoid going.
- ☐ 4) No opinion - Don't care at all.
- ☐ 5) Would prefer to go, but wouldn't make an effort to go.
- ☐ 6) Would make an effort to go.
- ☐ 7) Would do almost anything to go.

4. If you don't want to go on REFORGER, why not? (If you want to go, skip this question.)

- ☐ 1) Medical problem
- ☐ 2) Pregnant wife
- ☐ 3) Family problem
- ☐ 4) Financial problem
- ☐ 5) Legal problem
- ☐ 6) Part-time job
- ☐ 7) Personal relationships (other than family)
- ☐ 8) Problems with personal property
- ☐ 9) Don't like Army
- ☐ 10) Don't like REFORGER 77
- ☐ 11) Other (Specify: \_\_\_\_\_)

5. Do you think that decisions about sending women and men on REFORGER were made on the same basis?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

IF YOU ARE "NONDEPLOYABLE" (YOU CHECKED #4 ON QUESTION #1), SKIP TO QUESTION #10.

6. How well do you think the enlisted men in your company will do their jobs during REFORGER? (Jobs other than unit defense and housekeeping jobs.)

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

7. How well do you think the enlisted women in your company will do their jobs during REFORGER? (Jobs other than unit defense and housekeeping jobs.)

☐ 0) There are no women in my company.  
☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

8. How well do you think the enlisted men in your company will do their unit defense and housekeeping jobs during REFORGER? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

9. How well do you think the enlisted women in your company will do their unit defense and housekeeping jobs during REFORGER? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

☐ 0) There are no enlisted women in my company.  
☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know



10. Since you first came into the Army, approximately how many unit training exercises of different types have you taken part in? (For example, ARTEP's, CPX's, ORTT's, FTX's)

☐ 1) One  
☐ 2) Two or three  
☐ 3) Four or five  
☐ 4) Six or more (How many? \_\_\_\_\_)

11. During the past year, how often have you worked with enlisted women soldiers?

☐ 1) Never  
☐ 2) About once during the year  
☐ 3) About once every six months  
☐ 4) About once a month  
☐ 5) About once a week  
☐ 6) About once a day  
☐ 7) Every day, all day long

12. How would you rate the leadership by the other company NCO's during the past year?

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor

13. How would you rate the leadership of your company officers during the past year?

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor

14. In general, do the male NCO's in your company treat men and women enlisted soldiers differently?

☐ 1) Yes  
☐ 2) No  
☐ 3) Don't know

15. In what ways do male NCO's treat men and women enlisted soldiers differently? Check as many as apply. (Skip to the next question, if you answered "No" or "Don't know" to question #14.)
- ☐ 1) More privileges to women
  - ☐ 2) Assignment of easier tasks to women
  - ☐ 3) More on-the-job help for women
  - ☐ 4) More attention to personal problems of women
  - ☐ 5) More obscene language around men
  - ☐ 6) Harsher discipline for men
  - ☐ 7) More discipline for men
  - ☐ 8) Other (Specify: \_\_\_\_\_)
16. In general, do male officers in your company treat men and women enlisted soldiers differently?
- ☐ 1) Yes
  - ☐ 2) No
  - ☐ 3) Don't know
17. In what ways do male officers treat men and women enlisted soldiers differently? (Skip to the next question, if you answered "No" or "Don't know" to question #16.)
- ☐ 1) More privileges for women
  - ☐ 2) Assignment of easier tasks to women
  - ☐ 3) More on-the-job help for women
  - ☐ 4) More attention to personal problems of women
  - ☐ 5) More obscene language around men
  - ☐ 6) Harsher discipline for men
  - ☐ 7) More discipline for men
  - ☐ 8) Other (Specify: \_\_\_\_\_)
18. What do you think of REFORGER (being in the field over a long period of time) as a way of finding out how the US Army can perform in a wartime mission?
- ☐ 1) Excellent
  - ☐ 2) Good
  - ☐ 3) Fair
  - ☐ 4) Poor
  - ☐ 5) Very poor
19. What do you think of REFORGER (being in the field over a long period of time) as a way of finding out how units with women can perform in a wartime mission?
- ☐ 1) Excellent
  - ☐ 2) Good
  - ☐ 3) Fair
  - ☐ 4) Poor
  - ☐ 5) Very poor

20. If women were allowed to go into combat, what do you think most enlisted women in your company would do about going into combat in a wartime situation?
- ☐ 0) There are no women in my company.
  - ☐ 1) They would do almost anything to get to go.
  - ☐ 2) They would want to go, but wouldn't do anything to get to go.
  - ☐ 3) They wouldn't care one way or the other whether they go.
  - ☐ 4) They wouldn't want to go, but wouldn't try to get out of going.
  - ☐ 5) They would do almost anything to keep from going.
21. What do you think most enlisted men in your company would do about going into combat in a wartime situation?
- ☐ 1) They would do almost anything to go.
  - ☐ 2) They would want to go, but wouldn't do anything to get to go.
  - ☐ 3) They wouldn't care one way or the other whether they go.
  - ☐ 4) They wouldn't want to go, but wouldn't try to get out of going.
  - ☐ 5) They would do almost anything to keep from going.
22. What do you think you yourself would do about going into combat in a wartime situation?
- ☐ 1) I would do almost anything to get to go.
  - ☐ 2) I would want to go, but wouldn't do anything to get to go.
  - ☐ 3) I wouldn't care one way or the other whether I go.
  - ☐ 4) I wouldn't want to go, but wouldn't try to get out of going.
  - ☐ 5) I would do almost anything to keep from going.
23. Whom would you rather depend on to get a job done on post?
- ☐ 1) a woman
  - ☐ 2) a man
  - ☐ 3) either
24. Whom would you rather depend on to get a job done on REFORGER?
- ☐ 1) a woman
  - ☐ 2) a man
  - ☐ 3) either
25. If women were allowed to go into combat, whom would you rather depend on to get a job done in combat?
- ☐ 1) a woman
  - ☐ 2) a man
  - ☐ 3) either

26. If women were allowed to go into combat and if you were in a tough situation during combat, whom would you rather depend on to help you out of it?

- ☐ 1) a woman
- ☐ 2) a man
- ☐ 3) either

27. Who have a better chance of getting time off for personal problems?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

28. Who go on sick call more often?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

29. During a normal work week, who work the most hours?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

30. Do enlisted women try to get out of work by getting pregnant?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

Here are some statements others have made about women. How do you feel about them?

31. Women NCO's will not get much respect from the men in their units.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

32. Women would make just as good frontline soldiers as men if they were given the same kind of training.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

33. If women were assigned to combat jobs, the Army would:

- ☐ 1) become more effective.
- ☐ 2) remain just as effective.
- ☐ 3) become less effective.

34. Women don't make good bosses at work.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

35. Women should be included in space missions.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

36. The Army's mission is best carried out:

- ☐ 1) by men only.
- ☐ 2) mostly by men with some women in support roles.
- ☐ 3) mostly by men with some women in combat as well as support roles.
- ☐ 4) equally by men and women
- ☐ 5) mostly by women.

37. If a greater number of women were placed in command positions, the effectiveness of the Army:

- ☐ 1) would increase.
- ☐ 2) would decrease.
- ☐ 3) would not change.

38. Women commanders will not get much respect from the men in their units.

- \_\_\_ 1) Strongly agree
- \_\_\_ 2) Somewhat agree
- \_\_\_ 3) No opinion at all
- \_\_\_ 4) Somewhat disagree
- \_\_\_ 5) Strongly disagree

39. This question asks your opinion about the factors which affect the ability of a company to accomplish its combat mission in close support of a division on the battlefield. The question concerns the company's underlying ability to perform in general - not how well the company happens to perform in a particular field exercise (such as REFORGER 77). Five factors are listed below (plus an "other" category). Your relative weighting of these five factors should add to 100. Review the list and decide how much each factor affects the ability of a company to perform its mission. Next to each factor, enter the number of points (from 0 to 100) indicating the percentage of a company's ability that you think is affected by that factor.

FACTORS CONTRIBUTING TO THE ABILITY  
OF A COMPANY TO CARRY OUT ITS MISSION

Factor

leadership . . . . .	_____ %
morale . . . . .	_____ %
personal turbulence . . . . .	_____ %
training . . . . .	_____ %
percentage of women . . . . .	_____ %
other (what is it?): _____ . . . . .	_____ %
TOTAL	100%

Background Information

40. What unit will you be with during REFORGER? (Omit this item if you are nondeployable.)

121st Signal Battalion

- \_\_\_ 1) Headquarters and  
Headquarters Company  
\_\_\_ 2) Company A  
\_\_\_ 3) Company B  
\_\_\_ 4) Company C

1st Medical Battalion

- \_\_\_ 5) Headquarters and  
A Company  
\_\_\_ 6) Company C

1st S&T Battalion

- \_\_\_ 7) Headquarters and  
Headquarters Company  
\_\_\_ 8) Company A  
\_\_\_ 9) Company B

701st Maintenance Battalion

- \_\_\_ 10) Headquarters and Light  
Company  
\_\_\_ 11) Company B  
\_\_\_ 12) Company D

385th Military Police Battalion

- \_\_\_ 13) Headquarters and  
Headquarters Detachment  
\_\_\_ 14) Company A  
\_\_\_ 15) Company B  
\_\_\_ 16) Company C

793rd Military Police Battalion

- \_\_\_ 17) Headquarters and  
Headquarters Detachment  
\_\_\_ 18) Company A  
\_\_\_ 19) Company B  
\_\_\_ 20) Company C

Other Military Police Units

- \_\_\_ 21) 1st MP Company  
\_\_\_ 22) 1st MP Forward  
\_\_\_ 23) 3rd MP Company  
\_\_\_ 24) \_\_\_ Platoon, 4th MP Company  
\_\_\_ 25) 110th MP Platoon  
\_\_\_ 26) 545th MP Platoon

41. When did you join this unit?

\_\_\_  
(year)

\_\_\_  
(month)

42. Question 40 asked you which unit you are going with on REFORGER.  
If that unit is not the one you are assigned to, write the  
designation of the unit to which you are assigned \_\_\_\_\_

43. Did you have a tour of duty in Vietnam?

- ☐ 1) Yes
- ☐ 2) No

44. If you had a tour of duty in Vietnam, were you ever under enemy fire? (If you answered NO to #43 skip this question.)

- ☐ 1) Yes
- ☐ 2) No

45. What is the highest educational diploma or degree you have received?

- ☐ 1) No high school diploma or G.E.D.
- ☐ 2) G.E.D.
- ☐ 3) High school diploma
- ☐ 4) Associate's degree
- ☐ 5) Bachelor's degree
- ☐ 6) Graduate or professional degree

46. What is your sex?

- ☐ 1) Male
- ☐ 2) Female

47. What is your present paygrade?

- |                                |                                |
|--------------------------------|--------------------------------|
| <input type="checkbox"/> 1) E3 | <input type="checkbox"/> 4) E6 |
| <input type="checkbox"/> 2) E4 | <input type="checkbox"/> 5) E7 |
| <input type="checkbox"/> 3) E5 | <input type="checkbox"/> 6) E8 |

48. Which of the following best describes your plans for making the Army a career for twenty or more years?

- ☐ 1) DEFINITELY will seek a career in the Army
- ☐ 2) PROBABLY will seek a career in the Army
- ☐ 3) UNDECIDED about a career in the Army
- ☐ 4) PROBABLY will NOT seek a career in the Army
- ☐ 5) DEFINITELY will NOT seek a career in the Army



BOOKLET NUMBER

**ARI - REFORGER 77**  
**NONCOMMISSIONED OFFICER QUESTIONNAIRE**  
**FORM B - NCO**

**DATA REQUIRED BY THE PRIVACY ACT OF 1974**  
(5 U.S.C. 552a)

<b>TITLE OF FORM</b> ARI - REFORGER '77 NONCOMMISSIONED OFFICER QUESTIONNAIRE - FORM B - NCO		<b>PRESCRIBING DIRECTIVE</b> AR 70-1
<b>1. AUTHORITY</b>  10 USC Sec 4503		
<b>2. PRINCIPAL PURPOSE(S)</b>  The data collected with the attached form are to be used for research purposes only.		
<b>3. ROUTINE USES</b>  This is an experimental personnel data collection form developed by the U.S. Army Research Institute for the Behavioral and Social Sciences pursuant to its research mission as prescribed in AR 70-1. When identifiers (name or Social Security Number) are requested they are to be used for administrative and statistical control purposes only. Full confidentiality of the responses will be maintained in the processing of these data.		
<b>4. MANDATORY OR VOLUNTARY DISCLOSURE AND EFFECT ON INDIVIDUAL NOT PROVIDING INFORMATION</b>  Your participation in this research is strictly voluntary. Individuals are encouraged to provide complete and accurate information in the interests of the research, but there will be no effect on individuals for not providing all or any part of the information. This notice may be detached from the rest of the form and retained by the individual if so desired.		

FORM

Privacy Act Statement - 26 Sep 75

DA Form 4368-R, 1 May 75

A-59

ARI - REFORGER 77  
NONCOMMISSIONED OFFICER QUESTIONNAIRE - FORM B - NCO

Instructions

The Department of the Army is conducting research on Women in the Army. One aspect of the research concerns attitudes toward women in the Army and women soldiers in a field situation such as REFORGER 77.

Most of you helped in this research effort before you went on REFORGER 77. This questionnaire is similar to the one you filled out then. Your answers will be used for research purposes only and will not be associated with you individually. The purpose of asking personal questions, such as the amount of education you have, is to find out how different groups of NCO's answer the opinion questions.

Most questions provide you with a list of possible answers. Please check your answer in the space provided.

Example:

1. Did you participate in REFORGER 77?

☒ 1) Yes  
☐ 2) No

Some questions require you to write your answer in the space provided. All questions should be answered directly on the questionnaire. Feel free to write comments about any of your answers in the margins or other spaces.

Thank you for filling out the questionnaire.

1. How long were you on REFORGER 77?

- ☐ 1) Entire time.
- ☐ 2) Missed one day.
- ☐ 3) Missed two or three days.
- ☐ 4) Missed four or more days.
- ☐ 5) Didn't go on REFORGER 77.

2. Do you think the deployment decision in your case was fair; that is, was it the same for you as for others like you?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

3. How much did you want to go on REFORGER 77?

- ☐ 1) Would have done almost anything to avoid going.
- ☐ 2) Made an effort to avoid going.
- ☐ 3) Would have preferred not to go, but didn't make an effort to avoid going.
- ☐ 4) No opinion - Didn't care at all.
- ☐ 5) Preferred to go, but didn't make an effort to go.
- ☐ 6) Would make an effort to go.
- ☐ 7) Would have done almost anything to go.

4. If you didn't want to go on REFORGER 77, why not? (If you wanted to go, skip this question.)

- ☐ 1) Medical problem
- ☐ 2) Pregnant wife
- ☐ 3) Family problem
- ☐ 4) Financial problem
- ☐ 5) Legal problem
- ☐ 6) Part-time job
- ☐ 7) Personal relationships (other than family)
- ☐ 8) Problems with personal property
- ☐ 9) Don't like Army
- ☐ 10) Don't like REFORGER 77
- ☐ 11) Other (Specify: \_\_\_\_\_)

5. Do you think that decisions about sending women and men on REFORGER 77 were made on the same basis?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

6. How well do you think most enlisted men in you company did their jobs during REFORGER 77? (Jobs other than unit defense and housekeeping jobs.)

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

7. How well do you think most enlisted women in your company did their jobs during REFORGER 77? (Jobs other than unit defense and housekeeping jobs.)

☐ 0) There were no women in my company.  
☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

8. How well do you think most enlisted men in your company did their unit defense and housekeeping jobs during REFORGER 77? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

9. How well do you think most enlisted women in your company did their unit defense and housekeeping jobs during REFORGER 77? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

☐ 0) There were no enlisted women in my company.  
☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

10. Since you first came into the Army, approximately how many unit training exercises of different types have you taken part in? (For example, ARTEP's, CPX's, ORTT's, FTX's, including REFORGER.)

☐ 1) One  
☐ 2) Two or three  
☐ 3) Four or five  
☐ 4) Six or more (How many? \_\_\_\_\_)

11. During REFORGER 77, how often did you work with enlisted women soldiers?

☐ 1) Never  
☐ 2) Once  
☐ 3) About two or three times  
☐ 4) About four or five times  
☐ 5) About six to eight times  
☐ 6) Every day, or almost every day

12. How would you rate the leadership of your company officers during REFORGER 77?

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor

13. How would you rate the leadership of your company NCO's during REFORGER 77?

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor

14. In general, did the male NCO's in your company treat men and women enlisted soldiers differently during REFORGER 77?

☐ 1) Yes.  
☐ 2) No  
☐ 3) Don't know

15. In what ways did male NCO's treat men and women enlisted soldiers differently during REFORGER 77? Check as many as apply. (Skip to the next question, if you answered "No" or "Don't know" to question 14.)

☐ 1) More privileges for women  
☐ 2) Assignment of easier tasks to women  
☐ 3) More on-the-job help for women  
☐ 4) More attention to personal problems of women  
☐ 5) More obscene language around men  
☐ 6) Harsher discipline for men  
☐ 7) More discipline for men  
☐ 8) Other (Specify: \_\_\_\_\_)

16. In general, did male officers in your company treat men and women enlisted soldiers differently during REFORGER 77?

☐ 1) Yes  
☐ 2) No  
☐ 3) Don't know

17. In what ways did male officers treat men and women enlisted soldiers differently during REFORGER 77? (Skip to the next question, if you answered "No" or "Don't know" to question 16.)

☐ 1) More privileges for women  
☐ 2) Assignment of easier tasks to women  
☐ 3) More on-the-job help for women  
☐ 4) More attention to personal problems of women  
☐ 5) More obscene language around men  
☐ 6) Harsher discipline for men  
☐ 7) More discipline for men  
☐ 8) Other (Specify: \_\_\_\_\_)

18. What do you think of REFORGER 77 (being in the field over a long period of time) as a way of finding out how the US Army can perform in a wartime mission?

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor

19. What do you think of REFORGER 77 (being in the field over a long period of time) as a way of finding out how units with women can perform in a wartime mission?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

20. If women were allowed to go into combat, what do you think most enlisted women in your company would do about going into combat in a wartime situation?

- ☐ 0) There are no women in my company.
- ☐ 1) They would do almost anything to get to go.
- ☐ 2) They would want to go, but wouldn't do anything to get to go.
- ☐ 3) They wouldn't care one way or the other whether they go.
- ☐ 4) They wouldn't want to go, but wouldn't try to get out of going.
- ☐ 5) They would do almost anything to keep from going.

21. What do you think most enlisted men in your company would do about going into combat in a wartime situation?

- ☐ 1) They would do almost anything to go.
- ☐ 2) They would want to go, but wouldn't do anything to get to go.
- ☐ 3) They wouldn't care one way or the other whether they go.
- ☐ 4) They wouldn't want to go, but wouldn't try to get out of going.
- ☐ 5) They would do almost anything to keep from going.

22. What do you think you yourself would do about going into combat in a wartime situation?

- ☐ 1) I would do almost anything to get to go.
- ☐ 2) I would want to go, but wouldn't do anything to get to go.
- ☐ 3) I wouldn't care one way or the other whether I go.
- ☐ 4) I wouldn't want to go, but wouldn't try to get out of going.
- ☐ 5) I would do almost anything to keep from going.

23. Whom would you rather depend on to get a job done on post?

- ☐ 1) a woman
- ☐ 2) a man
- ☐ 3) either



24. Whom would you rather depend on to get a job done during a field exercise such as REFORGER 77?

- ☐ 1) a woman
- ☐ 2) a man
- ☐ 3) either

25. If women were allowed to go into combat, whom would you rather depend on to get a job done in combat?

- ☐ 1) a woman
- ☐ 2) a man
- ☐ 3) either

26. If women were allowed to go into combat and if you were in a tough situation during combat, whom would you rather depend on to help you out of it?

- ☐ 1) a woman
- ☐ 2) a man
- ☐ 3) either

27. Who had a better chance of getting time off for personal problems during REFORGER 77?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

28. Who went on sick call more often during REFORGER 77?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

29. During REFORGER 77, who worked the most hours?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

30. During REFORGER 77, who did more things to get out of work?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

Here are some statements others have made about women. How do you feel about them?

31. Women NCO's will not get much respect from the men in their units.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

32. Women would make just as good frontline soldiers as men if they were given the same kind of training.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

33. If women were assigned to combat jobs, the Army would:

- ☐ 1) become more effective.
- ☐ 2) remain just as effective.
- ☐ 3) become less effective.

34. Women don't make good bosses at work.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

35. Women should be included in space missions.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

36. The Army's mission is best carried out:

- ☐ 1) by men only.
- ☐ 2) mostly by men with some women in support roles.
- ☐ 3) mostly by men with some women in combat as well as support roles.
- ☐ 4) equally by men and women.
- ☐ 5) mostly by women.

37. If a greater number of women were placed in command positions, the effectiveness of the Army:

- ☐ 1) would increase.
- ☐ 2) would decrease.
- ☐ 3) would not change.

38. Women commanders will not get much respect from the men in their units.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

39. This question asks your opinion about the factors which affect the ability of a company to accomplish its combat mission in close support of a division on the battlefield. The question concerns the company's underlying ability to perform in general - not how well the company happens to perform in a particular field exercise (such as REFORGER 77). Five factors are listed below (plus an "other" category). Your relative weighting of these five factors should add to 100. Review the list and decide how much each factor affects the ability of a company to perform its mission. Next to each factor, enter the number of points (from 0 to 100) indicating the percentage of a company's ability that you think is explained by that factor.

FACTORS CONTRIBUTING TO THE ABILITY  
OF A COMPANY TO CARRY OUT ITS COMBAT MISSION

Factor

leadership . . . . .	_____	1
morale . . . . .	_____	1
personal turbulence . . . . .	_____	1
training . . . . .	_____	1
percentage of women . . . . .	_____	1
other (what is it?): _____	_____	1

4 24

TOTAL

100

40. In general, how did the performance of women soldiers compare with the performance of men soldiers during REFORGER 77?

- ☐ 0) I had no opportunity to observe the performance of women soldiers.
- ☐ 1) The men and women soldiers generally performed at about the same level.
- ☐ 2) The women soldiers generally performed better than the men soldiers.
- ☐ 3) The men soldiers generally performed better than the women soldiers.

Questions 41-43 ask whether the stress and fatigue resulting from REFORGER 77 impaired the performance of some soldiers more than others during three different periods of time:

41. During the first three days of the field exercise:

- ☐ 1) the performance of the women soldiers deteriorated more than that of the men soldiers.
- ☐ 2) the performance of the men soldiers deteriorated more than that of the women soldiers.
- ☐ 3) there was no difference in performance between the men and women soldiers.
- ☐ 4) don't know whether there was a difference.

42. During the middle five days of the field exercise:

- ☐ 1) the performance of the women soldiers deteriorated more than that of the men soldiers.
- ☐ 2) the performance of the men soldiers deteriorated more than that of the women soldiers.
- ☐ 3) there was no difference in performance between the men and women soldiers.
- ☐ 4) don't know whether there was a difference.

43. During the last three days of the field exercise:

- ☐ 1) the performance of the women soldiers deteriorated more than that of the men soldiers.
- ☐ 2) the performance of the men soldiers deteriorated more than that of the women soldiers.
- ☐ 3) there was no difference in performance between the men and women soldiers.
- ☐ 4) don't know whether there was a difference.

44. Did any units within your company fail to accomplish a REFORGER 77 task because of too many women in the unit? (If your answer is "No," skip to question 51).

- ☐ 0) No
- ☐ 1) Yes, once or twice
- ☐ 2) Yes, three or four times
- ☐ 3) Yes, five or more times

Questions 45 through 50 refer to your answer to question 44.

45. If failures to perform a task occurred during REFORGER 77, how often did each of these causes apply:

- 1) ☐ time(s) because the task required more strength than the women had.
- 2) ☐ time(s) because the required tasks were not suitable for women for reasons other than strength.
- 3) ☐ time(s) because the women soldiers involved hadn't received appropriate training.
- 4) ☐ time(s) because the supervisor didn't know how to supervise women.
- 5) ☐ time(s) because the men and women soldiers didn't work well together.
- 6) ☐ time(s) for other reason(s). (Specify: \_\_\_\_\_)

Choose the most serious failure that occurred because there were too many women in the unit and refer to this incident in answering questions 46-50.

46. How many soldiers were in this unit?

There were \_\_\_\_\_ men in this unit.  
There were \_\_\_\_\_ women in this unit.

47. Of those who were critical to the failure,

\_\_\_\_\_ were men.  
\_\_\_\_\_ were women.

48. What were the MOS of those men soldiers who were critical to the failure? Please list:

\_\_\_\_\_

49. What were the MOS of those women soldiers who were critical to the failure? Please list:

\_\_\_\_\_

50. Which of the following were true with respect to the most serious failure? (Check as many as apply.)

- \_\_\_\_\_ 1) The task required more strength than the women had.
- \_\_\_\_\_ 2) The task was not suitable for women for reasons other than strength.
- \_\_\_\_\_ 3) The women soldiers involved hadn't received appropriate training.
- \_\_\_\_\_ 4) The supervisor didn't know how to supervise women.
- \_\_\_\_\_ 5) The men and women soldiers didn't work well together.
- \_\_\_\_\_ 6) Other (specify: \_\_\_\_\_)

Background Information

51. What unit were you with during REFORGER 77?

121st Signal Battalion

- \_\_\_ 1) Headquarters and  
Headquarters Company
- \_\_\_ 2) Company A
- \_\_\_ 3) Company B
- \_\_\_ 4) Company C

793rd Military Police Battalion

- \_\_\_ 17) Headquarters and  
Headquarters Detachment
- \_\_\_ 18) Company A
- \_\_\_ 19) Company B
- \_\_\_ 20) Company C

1st Medical Battalion

- \_\_\_ 5) Headquarters and  
A Company
- \_\_\_ 6) Company C

Other Military Police Units

- \_\_\_ 21) 1st MP Company
- \_\_\_ 22) 1st MP Forward
- \_\_\_ 23) 3rd MP Company
- \_\_\_ 24) \_\_\_ Platoon, 4th MP  
Company
- \_\_\_ 25) 110th MP Platoon
- \_\_\_ 26) 545th MP Platoon

1st S&T Battalion

- \_\_\_ 7) Headquarters and  
Headquarters Company
- \_\_\_ 8) Company A
- \_\_\_ 9) Company B

3rd S&T Battalion

- \_\_\_ 27) Headquarters and  
Headquarters Company
- \_\_\_ 28) Company A
- \_\_\_ 29) Company B

701st Maintenance Battalion

- \_\_\_ 10) Headquarters and Light  
Company
- \_\_\_ 11) Company B
- \_\_\_ 12) Company D

1st Maintenance Battalion

- \_\_\_ 30) Headquarters and  
Headquarters Company
- \_\_\_ 31) 22nd Maintenance Co
- \_\_\_ 32) 78th Maintenance Co
- \_\_\_ 33) 124th Maintenance Co
- \_\_\_ 34) 586th Maintenance Co

385th Military Police Battalion

- \_\_\_ 13) Headquarters and  
Headquarters Detachment
- \_\_\_ 14) 194th Military Police Company
- \_\_\_ 15) 218th Military Police Company
- \_\_\_ 16) 300th Military Police Company
- \_\_\_ 35) 554th Military Police Company

Note: If your company is not in this list, write the complete name of your company here: \_\_\_\_\_

52. When did you join this unit?

(year)

(month)

53. Question 51 asked you which unit you were with on REFORGER 77. If that unit is not the one you are assigned to, write the designation of the unit to which you are assigned: \_\_\_\_\_

54. Did you serve a tour in Vietnam?

       1) Yes

2) No (If "No," skip to question 57).

55. Which of the following experiences, if any, did you have in Vietnam?

1) Engaging the enemy in combat

2) Providing support to combat units

3) Both of these

4) Neither of these

56. What kind of unit were you assigned to? Check as many as apply.

### 1) Combat

**2) Combat support**

**3) Combat service support**

4) TDA unit

5 5) More than one of these

57. What is the highest educational diploma or degree you have received?

           1) No high school diploma or G.E.D.

2) G.E.D.

3 3) High school diploma

4) Associate's degree

5) Bachelor's degree

         6) Graduate or professional degree

58. What is your sex?

1) Male

2) Female



59. What is your present paygrade?

☐ 1) E3  
☐ 2) E4  
☐ 3) E5

☐ 4) E6  
☐ 5) E7  
☐ 6) E8

☐ 7) E9

60. Which of the following best describes your plans for making the Army a career for 20 or more years?

☐ 1) DEFINITELY will seek a career in the Army  
☐ 2) PROBABLY will seek a career in the Army  
☐ 3) UNDECIDED about a career in the Army  
☐ 4) PROBABLY will NOT seek a career in the Army  
☐ 5) DEFINITELY will NOT seek a career in the Army

**ARI - REFORGER 77 OFFICER QUESTIONNAIRE**  
**FORM A - 0**

**PT 5168c**

DATA REQUIRED BY THE PRIVACY ACT OF 1974 (5 U.S.C. 552a)	
TITLE OF FORM ARI - REFORGER 77. OFFICER QUESTIONNAIRE - FORM A - 0	PRESCRIBING DIRECTIVE AR 70-1
1. AUTHORITY  10 USC Sec 4503	
2. PRINCIPAL PURPOSE(S)  The data collected with the attached form are to be used for research purposes only.	
3. ROUTINE USES  This is an experimental personnel data collection form developed by the U.S. Army Research Institute for the Behavioral and Social Sciences pursuant to its research mission as prescribed in AR 70-1. When identifiers (name or Social Security Number) are requested they are to be used for administrative and statistical control purposes only. Full confidentiality of the responses will be maintained in the processing of these data.	
4. MANDATORY OR VOLUNTARY DISCLOSURE AND EFFECT ON INDIVIDUAL NOT PROVIDING INFORMATION  Your participation in this research is strictly voluntary. Individuals are encouraged to provide complete and accurate information in the interests of the research, but there will be no effect on individuals for not providing all or any part of the information. This notice may be detached from the rest of the form and retained by the individual if so desired.	

FORM Privacy Act Statement - 26 Sep 75

DA Form 4368-R, 1 May 75

A-76

ARI - REFORGER 77  
OFFICER QUESTIONNAIRE - FORM A - 0

Instructions

The Department of the Army is conducting research on Women in the Army. One aspect of the research concerns attitudes toward women in the Army and women soldiers in a field situation such as REFORGER 77.

The purpose of this questionnaire is to get your opinions on this subject. Your answers will be used for research purposes only and will not be associated with you individually. The purpose of asking personal questions, such as the amount of education you have, is to find out how different groups of officers answer the opinion questions.

Most questions provide you with a list of possible answers. Please check your answer in the space provided.

Example:

1. Are you stationed at Fort Riley?

☒ 1) Yes  
☐ 2) No

Some questions require you to write your answer in the space provided. All questions should be answered directly on the questionnaire. Feel free to write comments about any of your answers in the margins or other spaces.

Thank you for filling out the questionnaire.

1. Are you going on REFORGER?

- ☐ 1) Yes.
- ☐ 2) Maybe. Am deployable, but have been told I'm on "standby."
- ☐ 3) Probably not. Am deployable, but have been told I'm not going.
- ☐ 4) No. I am nondeployable.

2. Do you think the deployment decision in your case was fair; that is, was it the same for you as for others like you?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

3. How much do you want to go on REFORGER?

- ☐ 1) Would do almost anything to avoid going.
- ☐ 2) Would make an effort to avoid going.
- ☐ 3) Would prefer not to go, but wouldn't make an effort to avoid going.
- ☐ 4) No opinion - Don't care at all.
- ☐ 5) Would prefer to go, but wouldn't make an effort to go.
- ☐ 6) Would make an effort to go.
- ☐ 7) Would do almost anything to go.

4. If you don't want to go on REFORGER, why not? (If you want to go, skip this question.)

- ☐ 1) Medical problem
- ☐ 2) Pregnant wife
- ☐ 3) Family problem
- ☐ 4) Financial problem
- ☐ 5) Legal problem
- ☐ 6) Part-time job
- ☐ 7) Personal relationships (other than family)
- ☐ 8) Problems with personal property
- ☐ 9) Don't like Army
- ☐ 10) Don't like REFORGER 77
- ☐ 11) Other (Specify: \_\_\_\_\_)

5. Do you think that decisions about sending women and men on REFORGER were made on the same basis?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

IF YOU ARE "NONDEPLOYABLE" (YOU CHECKED #4 ON QUESTION #1), SKIP TO QUESTION #10.

6. How well do you think the enlisted men in your company will do their jobs during REFORGER? (Jobs other than unit defense and housekeeping jobs.)

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

7. How well do you think the enlisted women in your company will do their jobs during REFORGER? (Jobs other than unit defense and housekeeping jobs.)

☐ 0) There are no women in my company.  
☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

8. How well do you think the enlisted men in your company will do their unit defense and housekeeping jobs during REFORGER? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

9. How well do you think the enlisted women in your company will do their unit defense and housekeeping jobs during REFORGER? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

☐ 0) There are no enlisted women in my company.  
☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

10. Since you first came into the Army, approximately how many unit training exercises of different types have you taken part in? (For example, ARTEP's, CPX's, ORTT's, FTX's)

☐ 1) One  
☐ 2) Two or three  
☐ 3) Four or five  
☐ 4) Six or more (How many? \_\_\_\_\_)

11. During the past year, how often have you worked with enlisted women soldiers?

☐ 1) Never  
☐ 2) About once during the year  
☐ 3) About once every six months  
☐ 4) About once a month  
☐ 5) About once a week  
☐ 6) About once a day  
☐ 7) Every day, all day long

12. How would you rate the leadership of the other company officers during the past year?

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor

13. How would you rate the leadership of your company NCO's during the past year?

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor

14. In general, do the male NCO's in your company treat men and women enlisted soldiers differently?

☐ 1) Yes  
☐ 2) No  
☐ 3) Don't know

15. In what ways do male NCO's treat men and women enlisted soldiers differently? Check as many as apply. (Skip to the next question, if you answered "No" or "Don't know" to question #14.)
- ☐ 1) More privileges to women
  - ☐ 2) Assignment of easier tasks to women
  - ☐ 3) More on-the-job help for women
  - ☐ 4) More attention to personal problems of women
  - ☐ 5) More obscene language around men
  - ☐ 6) Harsher discipline for men
  - ☐ 7) More discipline for men
  - ☐ 8) Other (Specify: \_\_\_\_\_)
16. In general, do male officers in your company treat men and women enlisted soldiers differently?
- ☐ 1) Yes
  - ☐ 2) No
  - ☐ 3) Don't know
17. In what ways do male officers treat men and women enlisted soldiers differently? (Skip to the next question, if you answered "No" or "Don't know" to question #16.)
- ☐ 1) More privileges for women
  - ☐ 2) Assignment of easier tasks to women
  - ☐ 3) More on-the-job help for women
  - ☐ 4) More attention to personal problems of women
  - ☐ 5) More obscene language around men
  - ☐ 6) Harsher discipline for men
  - ☐ 7) More discipline for men
  - ☐ 8) Other (Specify: \_\_\_\_\_)
18. What do you think of REFORGER (being in the field over a long period of time) as a way of finding out how the US Army can perform in a wartime mission?
- ☐ 1) Excellent
  - ☐ 2) Good
  - ☐ 3) Fair
  - ☐ 4) Poor
  - ☐ 5) Very poor
19. What do you think of REFORGER (being in the field over a long period of time) as a way of finding out how units with women can perform in a wartime mission?
- ☐ 1) Excellent
  - ☐ 2) Good
  - ☐ 3) Fair
  - ☐ 4) Poor
  - ☐ 5) Very poor



20. If women were allowed to go into combat, what do you think most enlisted women in your company would do about going into combat in a wartime situation?

- ☐ 0) There are no women in my company.
- ☐ 1) They would do almost anything to get to go.
- ☐ 2) They would want to go, but wouldn't do anything to get to go.
- ☐ 3) They wouldn't care one way or the other whether they go.
- ☐ 4) They wouldn't want to go, but wouldn't try to get out of going.
- ☐ 5) They would do almost anything to keep from going.

21. What do you think most enlisted men in your company would do about going into combat in a wartime situation?

- ☐ 1) They would do almost anything to go.
- ☐ 2) They would want to go, but wouldn't do anything to get to go.
- ☐ 3) They wouldn't care one way or the other whether they go.
- ☐ 4) They wouldn't want to go, but wouldn't try to get out of going.
- ☐ 5) They would do almost anything to keep from going.

22. What do you think you yourself would do about going into combat in a wartime situation?

- ☐ 1) I would do almost anything to get to go.
- ☐ 2) I would want to go, but wouldn't do anything to get to go.
- ☐ 3) I wouldn't care one way or the other whether I go.
- ☐ 4) I wouldn't want to go, but wouldn't try to get out of going.
- ☐ 5) I would do almost anything to keep from going.

23. Whom would you rather depend on to get a job done on post?

- ☐ 1) a woman
- ☐ 2) a man
- ☐ 3) either

24. Whom would you rather depend on to get a job done on REFORGER?

- ☐ 1) a woman
- ☐ 2) a man
- ☐ 3) either

25. If women were allowed to go into combat, whom would you rather depend on to get a job done in combat?

- ☐ 1) a woman
- ☐ 2) a man
- ☐ 3) either

26. If women were allowed to go into combat and if you were in a tough situation during combat, whom would you rather depend on to help you out of it?

- ☐ 1) a woman
- ☐ 2) a man
- ☐ 3) either

27. Who have a better chance of getting time off for personal problems?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

28. Who go on sick call more often?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

29. During a normal work week, who work the most hours?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

30. Do enlisted women try to get out of work by getting pregnant?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

Here are some statements others have made about women. How do you feel about them?

31. Women NCO's will not get much respect from the men in their units.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

32. Women would make just as good frontline soldiers as men if they were given the same kind of training.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

33. If women were assigned to combat jobs, the Army would:

- ☐ 1) become more effective.
- ☐ 2) remain just as effective.
- ☐ 3) become less effective.

34. Women don't make good bosses at work.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

35. Women should be included in space missions.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

36. The Army's mission is best carried out:

- ☐ 1) by men only.
- ☐ 2) mostly by men with some women in support roles.
- ☐ 3) mostly by men with some women in combat as well as support roles.
- ☐ 4) equally by men and women
- ☐ 5) mostly by women.

37. If a greater number of women were placed in command positions, the effectiveness of the Army:

- ☐ 1) would increase.
- ☐ 2) would decrease.
- ☐ 3) would not change.

38. Women commanders will not get much respect from the men in their units.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

39. This question asks your opinion about the factors which affect the ability of a company to accomplish its combat mission in close support of a division on the battlefield. The question concerns the company's underlying ability to perform in general--not how well the company happens to perform in a particular field exercise (such as REFORGER 77). Five factors are listed below (plus an "other" category). Your relative weighting of these five factors should add to 100. Review the list and decide how much each factor affects the ability of a company to perform its mission. Next to each factor, enter the number of points (from 0 to 100) indicating the percentage of a company's ability that you think is affected by that factor.

FACTORS CONTRIBUTING TO THE ABILITY  
OF A COMPANY TO CARRY OUT ITS MISSION

Factor

leadership . . . . .	_____X
morale . . . . .	_____X
personal turbulence . . . . .	_____X
training . . . . .	_____X
percentage of women . . . . .	_____X
other (what is it?): _____ . . . . .	_____X

TOTAL            100X

Background Information

40. What unit will you be with during REFORGER? (Omit this item if you are nondeployable.)

121st Signal Battalion

- \_\_\_ 1) Headquarters and  
Headquarters Company  
\_\_\_ 2) Company A  
\_\_\_ 3) Company B  
\_\_\_ 4) Company C

1st Medical Battalion

- \_\_\_ 5) Headquarters and  
A Company  
\_\_\_ 6) Company C

1st S&T Battalion

- \_\_\_ 7) Headquarters and  
Headquarters Company  
\_\_\_ 8) Company A  
\_\_\_ 9) Company B

701st Maintenance Battalion

- \_\_\_ 10) Headquarters and Light  
Company  
\_\_\_ 11) Company B  
\_\_\_ 12) Company D

385th Military Police Battalion

- \_\_\_ 13) Headquarters and  
Headquarters Detachment  
\_\_\_ 14) Company A  
\_\_\_ 15) Company B  
\_\_\_ 16) Company C

793rd Military Police Battalion

- \_\_\_ 17) Headquarters and  
Headquarters Detachment  
\_\_\_ 18) Company A  
\_\_\_ 19) Company B  
\_\_\_ 20) Company C

Other Military Police Units

- \_\_\_ 21) 1st MP Company  
\_\_\_ 22) 1st MP Forward  
\_\_\_ 23) 3rd MP Company  
\_\_\_ 24) \_\_\_ Platoon, 4th MP Company  
\_\_\_ 25) 110th MP Platoon  
\_\_\_ 26) 545th MP Platoon

41. When did you join this unit?

\_\_\_  
(year)

\_\_\_  
(month)

42. Question 40 asked you which unit you are going with on REFORGER. If that unit is not the one you are assigned to, write the designation of the unit to which you are assigned \_\_\_\_\_  
\_\_\_\_\_

43. Did you have a tour of duty in Vietnam?

- ☐ 1) Yes
- ☐ 2) No

44. If you had a tour of duty in Vietnam, were you ever under enemy fire? (If you answered NO to #43 skip this question.)

- ☐ 1) Yes
- ☐ 2) No

45. What is the highest educational diploma or degree you have received?

- ☐ 1) No high school diploma or G.E.D.
- ☐ 2) G.E.D.
- ☐ 3) High school diploma
- ☐ 4) Associate's degree
- ☐ 5) Bachelor's degree
- ☐ 6) Graduate or professional degree

46. What is your sex?

- ☐ 1) Male
- ☐ 2) Female

47. What is your present paygrade?

- |                                |                                 |
|--------------------------------|---------------------------------|
| <input type="checkbox"/> 1) O1 | <input type="checkbox"/> 5) W01 |
| <input type="checkbox"/> 2) O2 | <input type="checkbox"/> 6) W02 |
| <input type="checkbox"/> 3) O3 | <input type="checkbox"/> 7) W03 |
| <input type="checkbox"/> 4) O4 | <input type="checkbox"/> 8) W04 |

48. Which of the following best describes your plans for making the Army a career for twenty or more years?

- ☐ 1) DEFINITELY will seek a career in the Army
- ☐ 2) PROBABLY will seek a career in the Army
- ☐ 3) UNDECIDED about a career in the Army
- ☐ 4) PROBABLY will NOT seek a career in the Army
- ☐ 5) DEFINITELY will NOT seek a career in the Army

**BOOKLET NUMBER**

002124

**ARI - REFORGER 77 OFFICER QUESTIONNAIRE**  
**FORM B - 0**

**PT 5168d**

**A-88**

**DATA REQUIRED BY THE PRIVACY ACT OF 1974**  
(5 U.S.C. 552a)

**TITLE OF FORM**

ARI - REFORGER 77 OFFICER QUESTIONNAIRE - FORM B - 0

**PRESCRIBING DIRECTIVE**

AR 70-1

**1. AUTHORITY**

10 USC Sec 4503

**2. PRINCIPAL PURPOSE(S)**

The data collected with the attached form are to be used for research purposes only.

**3. ROUTINE USES**

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**4. MANDATORY OR VOLUNTARY DISCLOSURE AND EFFECT ON INDIVIDUAL NOT PROVIDING INFORMATION**

Your participation in this research is strictly voluntary. Individuals are encouraged to provide complete and accurate information in the interests of the research, but there will be no effect on individuals for not providing all or any part of the information. This notice may be detached from the rest of the form and retained by the individual if so desired.

FORM

Privacy Act Statement - 26 Sep 75

DA Form 4368-R, 1 May 75



ARI - REFORGER 77  
OFFICER QUESTIONNAIRE - FORM B - 0

Instructions

The Department of the Army is conducting research on Women in the Army. One aspect of the research concerns attitudes toward women in the Army and women soldiers in a field situation such as REFORGER 77.

Most of you helped in this research effort before you went on REFORGER 77. This questionnaire is similar to the one you filled out then. Your answers will be used for research purposes only and will not be associated with you individually. The purpose of asking personal questions, such as the amount of education you have, is to find out how different groups of officers answer the opinion questions.

Most questions provide you with a list of possible answers. Please check your answer in the space provided.

Example:

1. Did you participate in REFORGER 77?

☒ 1) Yes  
☐ 2) No

Some questions require you to write your answer in the space provided. All questions should be answered directly on the questionnaire. Feel free to write comments about any of your answers in the margins or other spaces.

Thank you for filling out the questionnaire.

1. How long were you on REFORGER 77?

- ☐ 1) Entire time.
- ☐ 2) Missed one day.
- ☐ 3) Missed two or three days.
- ☐ 4) Missed four or more days.
- ☐ 5) Didn't go on REFORGER 77.

2. Do you think the deployment decision in your case was fair; that is, was it the same for you as for others like you?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

3. How much did you want to go on REFORGER 77?

- ☐ 1) Would have done almost anything to avoid going.
- ☐ 2) Made an effort to avoid going.
- ☐ 3) Would have preferred not to go, but didn't make an effort to avoid going.
- ☐ 4) No opinion - Didn't care at all.
- ☐ 5) Preferred to go, but didn't make an effort to go.
- ☐ 6) Would make an effort to go.
- ☐ 7) Would have done almost anything to go.

4. If you didn't want to go on REFORGER 77, why not? (If you wanted to go, skip this question.)

- ☐ 1) Medical problem
- ☐ 2) Pregnant wife
- ☐ 3) Family problem
- ☐ 4) Financial problem
- ☐ 5) Legal problem
- ☐ 6) Part-time job
- ☐ 7) Personal relationships (other than family)
- ☐ 8) Problems with personal property
- ☐ 9) Don't like Army
- ☐ 10) Don't like REFORGER 77
- ☐ 11) Other (Specify: \_\_\_\_\_)

5. Do you think that decisions about sending women and men on REFORGER 77 were made on the same basis?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

6. How well do you think most enlisted men in you company did their jobs during REFORGER 77? (Jobs other than unit defense and housekeeping jobs.)

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

7. How well do you think most enlisted women in your company did their jobs during REFORGER 77? (Jobs other than unit defense and housekeeping jobs.)

☐ 0) There were no women in my company.  
☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

8. How well do you think most enlisted men in your company did their unit defense and housekeeping jobs during REFORGER 77? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

9. How well do you think most enlisted women in your company did their unit defense and housekeeping jobs during REFORGER 77? (Jobs such as perimeter defense, road marches, setting up and breaking camp.)

☐ 0) There were no enlisted women in my company.  
☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor  
☐ 6) Don't know

10. Since you first came into the Army, approximately how many unit training exercises of different types have you taken part in? (For example, ARTEP's, CPX's, ORTT's, FTX's, including REFORGER.)

☐ 1) One  
☐ 2) Two or three  
☐ 3) Four or five  
☐ 4) Six or more (How many? \_\_\_\_\_)

11. During REFORGER 77, how often did you work with enlisted women soldiers?

☐ 1) Never  
☐ 2) Once  
☐ 3) About two or three times  
☐ 4) About four or five times  
☐ 5) About six to eight times  
☐ 6) Every day, or almost every day

12. How would you rate the leadership of your company officers during REFORGER 77?

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor

13. How would you rate the leadership of your company NCO's during REFORGER 77?

☐ 1) Excellent  
☐ 2) Good  
☐ 3) Fair  
☐ 4) Poor  
☐ 5) Very poor

14. In general, did the male NCO's in your company treat men and women enlisted soldiers differently during REFORGER 77?

☐ 1) Yes  
☐ 2) No  
☐ 3) Don't know

15. In what ways did male NCO's treat men and women enlisted soldiers differently during REFORGER 77? Check as many as apply. (Skip to the next question, if you answered "No" or "Don't know" to question 14.)

- ☐ 1) More privileges for women
- ☐ 2) Assignment of easier tasks to women
- ☐ 3) More on-the-job help for women
- ☐ 4) More attention to personal problems of women
- ☐ 5) More obscene language around men
- ☐ 6) Harsher discipline for men
- ☐ 7) More discipline for men
- ☐ 8) Other (Specify: \_\_\_\_\_)

16. In general, did male officers in your company treat men and women enlisted soldiers differently during REFORGER 77?

- ☐ 1) Yes
- ☐ 2) No
- ☐ 3) Don't know

17. In what ways did male officers treat men and women enlisted soldiers differently during REFORGER 77? (Skip to the next question, if you answered "No" or "Don't know" to question 16.)

- ☐ 1) More privileges for women
- ☐ 2) Assignment of easier tasks to women
- ☐ 3) More on-the-job help for women
- ☐ 4) More attention to personal problems of women
- ☐ 5) More obscene language around men
- ☐ 6) Harsher discipline for men
- ☐ 7) More discipline for men
- ☐ 8) Other (Specify: \_\_\_\_\_)

18. What do you think of REFORGER 77 (being in the field over a long period of time) as a way of finding out how the US Army can perform in a wartime mission?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

19. What do you think of REFORGER 77 (being in the field over a long period of time) as a way of finding out how units with women can perform in a wartime mission?

- ☐ 1) Excellent
- ☐ 2) Good
- ☐ 3) Fair
- ☐ 4) Poor
- ☐ 5) Very poor

20. If women were allowed to go into combat, what do you think most enlisted women in your company would do about going into combat in a wartime situation?

- ☐ 0) There are no women in my company.
- ☐ 1) They would do almost anything to get to go.
- ☐ 2) They would want to go, but wouldn't do anything to get to go.
- ☐ 3) They wouldn't care one way or the other whether they go.
- ☐ 4) They wouldn't want to go, but wouldn't try to get out of going.
- ☐ 5) They would do almost anything to keep from going.

21. What do you think most enlisted men in your company would do about going into combat in a wartime situation?

- ☐ 1) They would do almost anything to go.
- ☐ 2) They would want to go, but wouldn't do anything to get to go.
- ☐ 3) They wouldn't care one way or the other whether they go.
- ☐ 4) They wouldn't want to go, but wouldn't try to get out of going.
- ☐ 5) They would do almost anything to keep from going.

22. What do you think you yourself would do about going into combat in a wartime situation?

- ☐ 1) I would do almost anything to get to go.
- ☐ 2) I would want to go, but wouldn't do anything to get to go.
- ☐ 3) I wouldn't care one way or the other whether I go.
- ☐ 4) I wouldn't want to go, but wouldn't try to get out of going.
- ☐ 5) I would do almost anything to keep from going.

23. Whom would you rather depend on to get a job done on post?

- ☐ 1) a woman
- ☐ 2) a man
- ☐ 3) either

24. Whom would you rather depend on to get a job done during a field exercise such as REFORGER 77?

- ☐ 1) a woman
- ☐ 2) a man
- ☐ 3) either

25. If women were allowed to go into combat, whom would you rather depend on to get a job done in combat?

- ☐ 1) a woman
- ☐ 2) a man
- ☐ 3) either

26. If women were allowed to go into combat and if you were in a tough situation during combat, whom would you rather depend on to help you out of it?

- ☐ 1) a woman
- ☐ 2) a man
- ☐ 3) either

27. Who had a better chance of getting time off for personal problems during REFORGER 77?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

28. Who went on sick call more often during REFORGER 77?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

29. During REFORGER 77, who worked the most hours?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

30. During REFORGER 77, who did more things to get out of work?

- ☐ 1) Enlisted men
- ☐ 2) Enlisted women
- ☐ 3) No difference

Here are some statements others have made about women. How do you feel about them?

31. Women NCO's will not get much respect from the men in their units.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

32. Women would make just as good frontline soldiers as men if they were given the same kind of training.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

33. If women were assigned to combat jobs, the Army would:

- ☐ 1) become more effective.
- ☐ 2) remain just as effective.
- ☐ 3) become less effective.

34. Women don't make good bosses at work.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

35. Women should be included in space missions.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree



36. The Army's mission is best carried out:

- ☐ 1) by men only.
- ☐ 2) mostly by men with some women in support roles.
- ☐ 3) mostly by men with some women in combat as well as support roles.
- ☐ 4) equally by men and women.
- ☐ 5) mostly by women.

37. If a greater number of women were placed in command positions, the effectiveness of the Army:

- ☐ 1) would increase.
- ☐ 2) would decrease.
- ☐ 3) would not change.

38. Women commanders will not get much respect from the men in their units.

- ☐ 1) Strongly agree
- ☐ 2) Somewhat agree
- ☐ 3) No opinion at all
- ☐ 4) Somewhat disagree
- ☐ 5) Strongly disagree

39. This question asks your opinion about the factors which affect the ability of a company to accomplish its combat mission in close support of a division on the battlefield. The question concerns the company's underlying ability to perform in general - not how well the company happens to perform in a particular field exercise (such as REFORGER 77). Five factors are listed below (plus an "other" category). Your relative weighting of these five factors should add to 100. Review the list and decide how much each factor affects the ability of a company to perform its mission. Next to each factor, enter the number of points (from 0 to 100) indicating the percentage of a company's ability that you think is explained by that factor.

FACTORS CONTRIBUTING TO THE ABILITY  
OF A COMPANY TO CARRY OUT ITS COMBAT MISSION

Factor

leadership . . . . .	_____ %
morale . . . . .	_____ %
personal turbulence . . . . .	_____ %
training . . . . .	_____ %
percentage of women . . . . .	_____ %
other (what is it?): _____	_____ %

A-98

TOTAL

100%

40. In general, how did the performance of women soldiers compare with the performance of men soldiers during REFORGER 77?

- ☐ 0) I had no opportunity to observe the performance of women soldiers.
- ☐ 1) The men and women soldiers generally performed at about the same level.
- ☐ 2) The women soldiers generally performed better than the men soldiers.
- ☐ 3) The men soldiers generally performed better than the women soldiers.

Questions 41-43 ask whether the stress and fatigue resulting from REFORGER 77 impaired the performance of some soldiers more than others during three different periods of time:

41. During the first three days of the field exercise:

- ☐ 1) the performance of the women soldiers deteriorated more than that of the men soldiers.
- ☐ 2) the performance of the men soldiers deteriorated more than that of the women soldiers.
- ☐ 3) there was no difference in performance between the men and women soldiers.
- ☐ 4) don't know whether there was a difference.

42. During the middle five days of the field exercise:

- ☐ 1) the performance of the women soldiers deteriorated more than that of the men soldiers.
- ☐ 2) the performance of the men soldiers deteriorated more than that of the women soldiers.
- ☐ 3) there was no difference in performance between the men and women soldiers.
- ☐ 4) don't know whether there was a difference.

43. During the last three days of the field exercise:

- ☐ 1) the performance of the women soldiers deteriorated more than that of the men soldiers.
- ☐ 2) the performance of the men soldiers deteriorated more than that of the women soldiers.
- ☐ 3) there was no difference in performance between the men and women soldiers.
- ☐ 4) don't know whether there was a difference.

44. Did any units within your company fail to accomplish a REFORGER 77 task because of too many women in the unit? (If your answer is "No," skip to question 51).

- ☐ 0) No
- ☐ 1) Yes, once or twice
- ☐ 2) Yes, three or four times
- ☐ 3) Yes, five or more times

Questions 45 through 50 refer to your answer to question 44.

45. If failures to perform a task occurred during REFORGER 77, how often did each of these causes apply:

- 1) ☐ time(s) because the task required more strength than the women had.
- 2) ☐ time(s) because the required tasks were not suitable for women for reasons other than strength.
- 3) ☐ time(s) because the women soldiers involved hadn't received appropriate training.
- 4) ☐ time(s) because the supervisor didn't know how to supervise women.
- 5) ☐ time(s) because the men and women soldiers didn't work well together.
- 6) ☐ time(s) for other reason(s). (Specify: \_\_\_\_\_)

Choose the most serious failure that occurred because there were too many women in the unit and refer to this incident in answering questions 46-50.

46. How many soldiers were in this unit?

There were \_\_\_\_\_ men in this unit.

There were \_\_\_\_\_ women in this unit.

47. Of those who were critical to the failure,

\_\_\_\_\_ were men.

\_\_\_\_\_ were women.

48. What were the MOS of those men soldiers who were critical to the failure? Please list:

\_\_\_\_\_

49. What were the MOS of those women soldiers who were critical to the failure? Please list:

\_\_\_\_\_

50. Which of the following were true with respect to the most serious failure? (Check as many as apply.)

\_\_\_\_\_ 1) The task required more strength than the women had.

\_\_\_\_\_ 2) The task was not suitable for women for reasons other than strength.

\_\_\_\_\_ 3) The women soldiers involved hadn't received appropriate training.

\_\_\_\_\_ 4) The supervisor didn't know how to supervise women.

\_\_\_\_\_ 5) The men and women soldiers didn't work well together.

\_\_\_\_\_ 6) Other (specify: \_\_\_\_\_)

Background Information

51. What unit were you with during REFORGER 77?

121st Signal Battalion

- \_\_\_ 1) Headquarters and  
Headquarters Company
- \_\_\_ 2) Company A
- \_\_\_ 3) Company B
- \_\_\_ 4) Company C

793rd Military Police Battalion

- \_\_\_ 17) Headquarters and  
Headquarters Detachment
- \_\_\_ 18) Company A
- \_\_\_ 19) Company B
- \_\_\_ 20) Company C

1st Medical Battalion

- \_\_\_ 5) Headquarters and  
A Company
- \_\_\_ 6) Company C

Other Military Police Units

- \_\_\_ 21) 1st MP Company
- \_\_\_ 22) 1st MP Forward
- \_\_\_ 23) 3rd MP Company
- \_\_\_ 24) \_\_\_ Platoon, 4th MP  
Company
- \_\_\_ 25) 110th MP Platoon
- \_\_\_ 26) 545th MP Platoon

1st S&T Battalion

- \_\_\_ 7) Headquarters and  
Headquarters Company
- \_\_\_ 8) Company A
- \_\_\_ 9) Company B

3rd S&T Battalion

- \_\_\_ 27) Headquarters and  
Headquarters Company
- \_\_\_ 28) Company A
- \_\_\_ 29) Company B

701st Maintenance Battalion

- \_\_\_ 10) Headquarters and Light  
Company
- \_\_\_ 11) Company B
- \_\_\_ 12) Company D

1st Maintenance Battalion

- \_\_\_ 30) Headquarters and  
Headquarters Company
- \_\_\_ 31) 22nd Maintenance Co
- \_\_\_ 32) 78th Maintenance Co
- \_\_\_ 33) 124th Maintenance Co
- \_\_\_ 34) 586th Maintenance Co

385th Military Police Battalion

- \_\_\_ 13) Headquarters and  
Headquarters Detachment
- \_\_\_ 14) 194th Military Police Company
- \_\_\_ 15) 218th Military Police Company
- \_\_\_ 16) 300th Military Police Company
- \_\_\_ 35) 554th Military Police Company

Note: If your company is not in this list, write the complete name of your company here: \_\_\_\_\_

52. When did you join this unit?

**(year)**

(month)

53. Question 51 asked you which unit you were with on REFORGER 77. If that unit is not the one you are assigned to, write the designation of the unit to which you are assigned: \_\_\_\_\_

54. Did you serve a tour in Vietnam?

**1) Yes**

2) No (If "No," skip to question 57).

55. Which of the following experiences, if any, did you have in Vietnam?

1) Engaging the enemy in combat

2) Providing 'support to combat units

3) Both of these

4) Neither of these

56. What kind of unit were you assigned to? Check as many as apply.

### 1) Combat

2) Combat support

3) Combat service support

4) TDA unit

5) More than one of these

57. What is the highest educational diploma or degree you have received?

1) No high school diploma or G.E.D.

2) G. E. D.

3) High school diploma

4) Associate's degree

5) Bachelor's degree

         6) Graduate or professional degree

58. What is your sex?

1) Male

2), Female

59. What is your present paygrade?

- |                                |                                  |
|--------------------------------|----------------------------------|
| <input type="checkbox"/> 1) 01 | <input type="checkbox"/> 7) WO1  |
| <input type="checkbox"/> 2) 02 | <input type="checkbox"/> 8) WO2  |
| <input type="checkbox"/> 3) 03 | <input type="checkbox"/> 9) WO3  |
| <input type="checkbox"/> 4) 04 | <input type="checkbox"/> 10) WO4 |
| <input type="checkbox"/> 5) 05 |                                  |
| <input type="checkbox"/> 6) 06 |                                  |

60. Which of the following best describes your plans for making the Army a career for 20 or more years?

- ☐ 1) DEFINITELY will seek a career in the Army
- ☐ 2) PROBABLY will seek a career in the Army
- ☐ 3) UNDECIDED about a career in the Army
- ☐ 4) PROBABLY will NOT seek a career in the Army
- ☐ 5) DEFINITELY will NOT seek a career in the Army

**BOOKLET NUMBER**

**ARI - REFORGER 77**  
**SUPPLEMENTAL QUESTIONNAIRE**

**3RD SUPPLY & TRANSPORTATION BATTALION**  
**COMPANY A**

**PT 5168g**

**A-105**



**DATA REQUIRED BY THE PRIVACY ACT OF 1974**

(5 U.S.C. 552a)

**TITLE OF FORM****PT 5168g, ARI - REFORGER 77 Supplemental Questionnaire****PRESCRIBING DIRECTIVE****AR 70-1****1. AUTHORITY****10 USC Sec 4503****2. PRINCIPAL PURPOSE(S)**

The data collected with the attached form are to be used for research purposes only.

**3. ROUTINE USES**

This is an experimental personnel data collection form developed by the U.S. Army Research Institute for the Behavioral and Social Sciences pursuant to its research mission as prescribed in AR 70-1. When identifiers (name or Social Security Number) are requested they are to be used for administrative and statistical control purposes only. Full confidentiality of the responses will be maintained in the processing of these data.

**4. MANDATORY OR VOLUNTARY DISCLOSURE AND EFFECT ON INDIVIDUAL NOT PROVIDING INFORMATION**

Your participation in this research is strictly voluntary. Individuals are encouraged to provide complete and accurate information in the interests of the research, but there will be no effect on individuals for not providing all or any part of the information. This notice may be detached from the rest of the form and retained by the individual if so desired.

**FORM****Privacy Act Statement - 28 Sep 75****DA Form 4368-R, 1 May 75****A-106**

**3rd Supply & Transportation Battalion  
Company A**

The MTOE for your company authorizes 120 soldiers E1 to E5. The table below shows the MOS's and the authorized number of soldiers in each MOS. Assume there must be exactly 12 WOMEN soldiers in the company. Show below how you would allocate these women--i.e., what MOS's you would like them to have and how many in each MOS--during a field exercise such as REFORGER 77. (Do not exceed the authorized number of soldiers for each MOS.)

<u>MOS</u>	<u>Title</u>	<u>No. Authorized for Company</u>	<u>No. of Women</u>
36K	Tactical Wire Operations Specialist	1	—
52B	Power Generation Equipment Operator/Mechanic	3	—
62M	Rough Terrain Forklift and Loader Operator	4	—
63B	Wheel Vehicle Mechanic	5	—
63C	Track Vehicle Mechanic	2	—
63J	Quartermaster Equipment Repairman	2	—
64C	Motor Transport Operator	1	—
71B	Clerk-Typist	1	—
75B	Unit-Clerk	1	—
76D	Materiel Supplyman	17	—
76V	Storage Supplyman	13	—
76W	Petroleum Supply Specialist	14	—
76X	Subsistence Supplyman	18	—
76Y	Unit/Organization Supplyman	37	—
92C	Petroleum Laboratory Specialist	<u>1</u>	—
		<b>Total = 120</b>	<b>Total = 12 Women</b>

1. How many enlisted soldiers were under your general supervision during REFORGER 77?

Number = \_\_\_\_\_

2. How many enlisted soldiers did you directly supervise during REFORGER 77?

Number = \_\_\_\_\_

If you are a Commissioned Officer, answer question 3.

If you are a Noncommissioned Officer, answer question 4.

If you are a Warrant Officer, go directly to page 3.

3. Commissioned Officers only:

Were you a commander, executive officer or platoon leader during REFORGER 77?

- \_\_\_\_ 1) Yes  
\_\_\_\_ 2) No

4. Noncommissioned Officers only:

Were you a sergeant major, first sergeant or platoon sergeant during REFORGER 77?

- \_\_\_\_ 1) Yes  
\_\_\_\_ 2) No

Now complete the following pages.

ARI - REFORGER 77

SUPPLEMENTAL QUESTIONNAIRE

Instructions

This questionnaire is a supplement to the Officer or NCO Questionnaire you have just completed.

PLEASE COPY THE BOOKLET NUMBER FROM THE TITLE PAGE OF YOUR OFFICER OR NCO QUESTIONNAIRE INTO THE BOX IN THE UPPER RIGHT HAND CORNER OF THIS SUPPLEMENTAL QUESTIONNAIRE. CHECK THAT YOU HAVE COPIED THE NUMBER CORRECTLY.

This number is needed so your answers from the two booklets can be combined. The number will not be used to identify you as an individual.

**3rd Supply & Transportation Battalion  
Company A**

Now assume, for the same situation, that there must be exactly 12 MEN soldiers.  
Show below how you would allocate these men--i.e., what MOS's you would like them  
to have and how many in each MOS.

<u>MOS</u>	<u>Title</u>	<u>No. Authorized for Company</u>	<u>No. of Men</u>
36K	Tactical Wire Operations Specialist	1	_____
52B	Power Generation Equipment Operator/Mechanic	3	_____
62M	Rough Terrain Forklift and Loader Operator	4	_____
63B	Wheel Vehicle Mechanic	5	_____
63C	Track Vehicle Mechanic	2	_____
63J	Quartermaster Equipment Repairman	2	_____
64C	Motor Transport Operator	1	_____
71B	Clerk-Typist	1	_____
75B	Unit-Clerk	1	_____
76D	Material Supplyman	17	_____
76V	Storage Supplyman	13	_____
76W	Petroleum Supply Specialist	14	_____
76X	Subsistence Supplyman	18	_____
76Y	Unit/Organization Supplyman	37	_____
92C	Petroleum Laboratory Specialist	<u>1</u>	_____
		Total = 120	Total 12 Men

**3rd Supply & Transportation Battalion  
Company A**

Now assume, for the same situation, that there must be exactly 42 WOMEN soldiers.  
Show below how you would allocate these men.

<u>MOS</u>	<u>Title</u>	<u>No. Authorized for Company</u>	<u>No. of Women</u>
36K	Tactical Wire Operations Specialist	1	_____
52B	Power Generation Equipment Operator/Mechanic	3	_____
62M	Rough Terrain Forklift and Loader Operator	4	_____
63B	Wheel Vehicle Mechanic	5	_____
63C	Track Vehicle Mechanic	2	_____
63J	Quartermaster Equipment Repairman	2	_____
64C	Motor Transport Operator	1	_____
71B	Clerk-Typist	1	_____
75B	Unit-Clerk	1	_____
76D	Materiel Supplyman	17	_____
76V	Storage Supplyman	13	_____
76W	Petroleum Supply Specialist	14	_____
76X	Subsistence Supplyman	18	_____
76Y	Unit/Organization Supplyman	37	_____
92C	Petroleum Laboratory Specialist	<u>1</u>	_____
		<b>Total = 120</b>	<b>Total = 42 Women</b>

**3rd Supply & Transportation Battalion  
Company A**

Now assume, for the same situation, that there must be exactly 42 MEN soldiers.  
Show below how you would allocate these men.

<u>MOS</u>	<u>Title</u>	<u>No. Authorized for Company</u>	<u>No. of Men</u>
36K	Tactical Wire Operations Specialist	1	—
52B	Power Generation Equipment Operator/Mechanic	3	—
62M	Rough Terrain Forklift and Loader Operator	4	—
63B	Wheel Vehicle Mechanic	5	—
63C	Track Vehicle Mechanic	2	—
63J	Quartermaster Equipment Repairman	2	—
64C	Motor Transport Operator	1	—
71B	Clerk-Typist	1	—
75B	Unit-Clerk	1	—
76D	Materiel Supplyman	17	—
76V	Storage Supplyman	13	—
76W	Petroleum Supply Specialist	14	—
76X	Subsistence Supplyman	18	—
76Y	Unit/Organization Supplyman	37	—
92C	Petroleum Laboratory Specialist	1	—
		<u>1</u>	<u>—</u>
		<b>Total = 120</b>	<b>Total = 42 Men</b>

**3rd Supply & Transportation Battalion  
Company A**

Now assume, for the same situation, that there must be exactly 60 WOMEN soldiers.  
Show below how you would allocate these women.

<u>MOS</u>	<u>Title</u>	<u>No. Authorized for Company</u>	<u>No. of Women</u>
36K	Tactical Wire Operations Specialist	1	—
52B	Power Generation Equipment Operator/Mechanic	3	—
62M	Rough Terrain Forklift and Loader Operator	4	—
63B	Wheel Vehicle Mechanic	5	—
63C	Track Vehicle Mechanic	2	—
63J	Quartermaster Equipment Repairman	2	—
64C	Motor Transport Operator	1	—
71B	Clerk-Typist	1	—
75B	Unit-Clerk	1	—
76D	Material Supplyman	17	—
76V	Storage Supplyman	13	—
76W	Petroleum Supply Specialist	14	—
76X	Subsistence Supplyman	18	—
76Y	Unit/Organization Supplyman	37	—
92C	Petroleum Laboratory Specialist	<u>1</u>	—
		<b>Total = 120</b>	<b>Total = 60 Women</b>



3rd Supply & Transportation Battalion  
Company A

Which of these MOS's present problems for the average women because of the physical requirements of the job? Check those MOS's.

___ 36K	Tactical Wire Operations Specialist
___ 52B	Power Generation Equipment Operator/Mechanic
___ 62M	Rough Terrain Forklift and Loader Operator
___ 63B	Wheel Vehicle Mechanic
___ 63C	Track Vehicle Mechanic
___ 63J	Quartermaster Equipment Repairman
___ 64C	Motor Transport Operator
___ 71B	Clerk-Typist
___ 75B	Unit Clerk
___ 76D	Materiel Supplyman
___ 76V	Storage Supplyman
___ 76W	Petroleum Supply Specialist
___ 76X	Subsistence Supplyman
___ 76Y	Unit/Organization Supplyman
___ 92C	Petroleum Laboratory Specialist

SCHEDULE 1  
REFORGER 77 - ARI  
COMPANY DEPLOYABILITY RECORD (ENLISTED)

Date \_\_\_\_\_  
Day \_\_\_\_\_ Month \_\_\_\_\_

A. Instl: \_\_\_\_\_ B. Bn: \_\_\_\_\_ C. Co: \_\_\_\_\_

D. Enlisted Personnel:  
Assigned to this Company

	<u>Total</u>	<u>Males</u>	<u>Females</u>
--	--------------	--------------	----------------

(1) Deployable-going on REF with this Co.	_____	_____	_____
(2) Deployable-going on REF with another Co(K)	_____	_____	_____
(3) Deployable-not going with any Co(H) (include standbys)	_____	_____	_____
(4) Nondeployable on REF (G)	_____	_____	_____
(5) Total Assigned	_____	_____	_____

Attached, Filler, etc., Deploying with this Co.

(6) From another deployable Co.(I)	_____	_____	_____
(7) From a nondeployable Co.(J)	_____	_____	_____
(8) Total attached, Filler, etc.	_____	_____	_____
(9) Total Assigned, Attached, Filler, etc. (5)+(8)	_____	_____	_____

E. Reasons for Company Personnel Not Going with This Co. on REF 77:

	<u>Total</u>	<u>Nondeployable</u>	<u>Deployable-not-going with this company</u>
		<u>Males</u> <u>Females</u>	<u>Males</u> <u>Females</u>
(1) Medical/dental (family)	_____	_____	_____
(2) Medical/dental (self)	_____	_____	_____
(3) Pregnancy (health)	_____	_____	_____
(4) Pregnancy (uniform)	_____	_____	_____
(5) Compassionate Reason	_____	_____	_____
(6) ETS/PCS	_____	_____	_____
(7) Fulfill Enl/Reenl Option	_____	_____	_____
(8) Personnel Action Pending	_____	_____	_____
(9) Bad attitude	_____	_____	_____
(10) Poor attitude	_____	_____	_____
(11) Other (specify)	_____	_____	_____
SD _____	_____	_____	_____
Mission Essential _____	_____	_____	_____
School _____	_____	_____	_____
TDY _____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

F. Data Collector: \_\_\_\_\_

SCHEDULE 1

p. 2

Date                        
Day Month

Co:                                 

G. Nondeployables

<u>Names</u>	<u>Rank</u>	<u>Sex</u>	<u>Reasons*</u>
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
14. _____	_____	_____	_____
15. _____	_____	_____	_____
16. _____	_____	_____	_____
17. _____	_____	_____	_____
18. _____	_____	_____	_____
19. _____	_____	_____	_____
20. _____	_____	_____	_____
21. _____	_____	_____	_____
22. _____	_____	_____	_____
23. _____	_____	_____	_____
24. _____	_____	_____	_____
25. _____	_____	_____	_____
26. _____	_____	_____	_____
27. _____	_____	_____	_____
28. _____	_____	_____	_____
29. _____	_____	_____	_____
30. _____	_____	_____	_____

SCHEDULE 1

p.3

Date \_\_\_\_\_  
 Day \_\_\_\_\_ Month \_\_\_\_\_  
 Co. \_\_\_\_\_

H. Deployables-Not going with any company

	<u>Names</u>	<u>Rank</u>	<u>Sex</u>	<u>Yes</u>	<u>Standby</u>	
					<u>No</u>	<u>Not Sure</u>
1.	_____	_____	_____	_____	_____	_____
2.	_____	_____	_____	_____	_____	_____
3.	_____	_____	_____	_____	_____	_____
4.	_____	_____	_____	_____	_____	_____
5.	_____	_____	_____	_____	_____	_____
6.	_____	_____	_____	_____	_____	_____
7.	_____	_____	_____	_____	_____	_____
8.	_____	_____	_____	_____	_____	_____
9.	_____	_____	_____	_____	_____	_____
10.	_____	_____	_____	_____	_____	_____
11.	_____	_____	_____	_____	_____	_____
12.	_____	_____	_____	_____	_____	_____
13.	_____	_____	_____	_____	_____	_____
14.	_____	_____	_____	_____	_____	_____
15.	_____	_____	_____	_____	_____	_____
16.	_____	_____	_____	_____	_____	_____
17.	_____	_____	_____	_____	_____	_____
18.	_____	_____	_____	_____	_____	_____
19.	_____	_____	_____	_____	_____	_____
20.	_____	_____	_____	_____	_____	_____
21.	_____	_____	_____	_____	_____	_____
22.	_____	_____	_____	_____	_____	_____
23.	_____	_____	_____	_____	_____	_____
24.	_____	_____	_____	_____	_____	_____
25.	_____	_____	_____	_____	_____	_____
26.	_____	_____	_____	_____	_____	_____
27.	_____	_____	_____	_____	_____	_____
28.	_____	_____	_____	_____	_____	_____
29.	_____	_____	_____	_____	_____	_____
30.	_____	_____	_____	_____	_____	_____
31.	_____	_____	_____	_____	_____	_____
32.	_____	_____	_____	_____	_____	_____
33.	_____	_____	_____	_____	_____	_____
34.	_____	_____	_____	_____	_____	_____
35.	_____	_____	_____	_____	_____	_____
36.	_____	_____	_____	_____	_____	_____
37.	_____	_____	_____	_____	_____	_____
38.	_____	_____	_____	_____	_____	_____
39.	_____	_____	_____	_____	_____	_____
40.	_____	_____	_____	_____	_____	_____

SCHEDULE I  
p.4

Date \_\_\_\_\_  
Day \_\_\_\_\_ Month \_\_\_\_\_  
Co. \_\_\_\_\_

I. Deployables from another deployable company, but going with this company:

<u>NAME</u>	<u>RANK</u>	<u>SEX</u>	<u>Reasons for going with this company</u>
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____

J. Deployables from a nondeployable company, but going with this company:

<u>NAME</u>	<u>RANK</u>	<u>SEX</u>	<u>Reasons for going with this company</u>
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____

K. Deployables from this company, but going with another company:

<u>NAME</u>	<u>RANK</u>	<u>SEX</u>	<u>Company going with - Reason</u>
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____

PT 5167a  
added 19-8-77

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SCHEDULE 2  
REFORGER 77 ARI  
WORKSHEET INDIVIDUAL DEPLOYABILITY

Date \_\_\_\_\_  
Day Month

- A. Instl: \_\_\_\_\_ B. Bn: \_\_\_\_\_ C. Co: \_\_\_\_\_
- D. Source of Info(Specify): \_\_\_\_\_ E: Plt Ldr: \_\_\_\_\_ F: Plt Sgt: \_\_\_\_\_
- G. Nondeployable \_\_\_\_\_ Deployable, not going \_\_\_\_\_ Unsure \_\_\_\_\_
- Comment: \_\_\_\_\_
- H. Sex: \_\_\_\_\_ I. Rank: \_\_\_\_\_
- J. PMOS: \_\_\_\_\_ K. SMOS: \_\_\_\_\_  
code title code title
- L. DMOS: \_\_\_\_\_ M. Auth. TOE MOS \_\_\_\_\_  
code title code title
- N. Actual job to which assigned: \_\_\_\_\_
- O. Other information
1. From personnel form:
  2. From company or platoon officer, NCO or other: Specify \_\_\_\_\_
- P. If this soldier were not kept out of REFORGER for the reasons we have just talked about, how much would you like the soldier to go or not to go on REFORGER 77? Rate your choice on a scale from 1 to 7.
- (1) \_\_\_\_\_ Would do almost anything to prevent him/her from going.
  - (2) \_\_\_\_\_ Would put forth effort to prevent him/her from going.
  - (3) \_\_\_\_\_ Would prefer he/she did not go, but wouldn't put forth any effort to prevent him/her from going.
  - (4) \_\_\_\_\_ No opinion Don't care at all.
  - (5) \_\_\_\_\_ Would prefer that he/she go, but wouldn't put forth any effort to help him/her to go.
  - (6) \_\_\_\_\_ Would put forth effort to help him/her to go.
  - (7) \_\_\_\_\_ Would do almost anything to help him/her to go.

SCHEDULE 2 p. 2

Q. Appointment for interview:

Date \_\_\_\_\_ Hour \_\_\_\_\_ Place \_\_\_\_\_

R. Miscellaneous data about this soldier which is related to REFORGER 77:  
Record the facts that may come to your attention at a later date  
which concern the utilization of female soldiers in the Army.

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SCHEDULE 3  
REFORGER 77 - ARI  
ENLISTED DEPLOYABILITY INTERVIEW SCHEDULE

Date \_\_\_\_\_  
Day \_\_\_\_\_ Month \_\_\_\_\_

A. Instl: \_\_\_\_\_ B. Bn: \_\_\_\_\_ C. Co: \_\_\_\_\_

D. Sex: (1) \_\_\_\_\_ Male (2) \_\_\_\_\_ Female

E. Rank: \_\_\_\_\_ E-1 \_\_\_\_\_ E-2 \_\_\_\_\_ E-3 \_\_\_\_\_ E-4 \_\_\_\_\_ E-5 \_\_\_\_\_ E-6 \_\_\_\_\_ E-7

F. PMOS: \_\_\_\_\_ G. SMOS: \_\_\_\_\_  
code title code title

H. DMOS: \_\_\_\_\_  
code title

I. If you are not working in any of your MOS's, what do you usually do most of the time? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

J. When did you enter the Army? Day \_\_\_\_\_ Month \_\_\_\_\_ Year \_\_\_\_\_

K. When did you come to this Post? Day \_\_\_\_\_ Month \_\_\_\_\_ Year \_\_\_\_\_

L. When did you come to this Company? Day \_\_\_\_\_ Month \_\_\_\_\_ Year \_\_\_\_\_

M. Are you "nondeployable?" \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Don't know

Are you "deployable, not going?" \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Don't know

Are you a standby? \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Don't know

N. Why wasn't your name place on the ramp manifest for REFORGER?

SPECIFY OR COMMENT

- (1) \_\_\_\_\_ Medical/dental (family) \_\_\_\_\_
- (2) \_\_\_\_\_ Medical/dental (self) \_\_\_\_\_
- (3) \_\_\_\_\_ Pregnancy (health) \_\_\_\_\_
- (4) \_\_\_\_\_ Pregnancy (uniform) \_\_\_\_\_
- (5) \_\_\_\_\_ Compassionate reason \_\_\_\_\_
- (6) \_\_\_\_\_ ETS/PCS \_\_\_\_\_
- (7) \_\_\_\_\_ Fulfill Enl/Reenl Options \_\_\_\_\_
- (8) \_\_\_\_\_ Personnel Action Pending \_\_\_\_\_
- (9) \_\_\_\_\_ "Someone said: Bad attitude" \_\_\_\_\_
- (10) \_\_\_\_\_ "Someone said: Poor performance" \_\_\_\_\_
- (11) \_\_\_\_\_ "Someone doesn't like me" \_\_\_\_\_
- (12) \_\_\_\_\_ Told not going; no reason given \_\_\_\_\_
- (13) \_\_\_\_\_ Needed at Riley (guard duty, CQ, etc.) \_\_\_\_\_
- (14) \_\_\_\_\_ Other (Specify: e.g., SD. Mission Essential. School, TDY): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



SCHEDULE 3 - p. 2

O. Apart from the official reason(s) for not going on REFORGER, are there other personal reasons why you would prefer not to go on REFORGER? ☐ Yes ☐ No

If "Yes", why?

SPECIFY OR COMMENT

- (1) ☐ Family problem \_\_\_\_\_
- (2) ☐ Financial problem \_\_\_\_\_
- (3) ☐ Legal problem \_\_\_\_\_
- (4) ☐ Part-time job \_\_\_\_\_
- (5) ☐ Other personal relationships \_\_\_\_\_
- (6) ☐ Problems with personal property \_\_\_\_\_
- (7) ☐ Doesn't like Army \_\_\_\_\_
- (8) ☐ Doesn't like REFORGER 77 \_\_\_\_\_
- (9) ☐ Other (Specify: \_\_\_\_\_)

P. If the official reason(s) for your not going did not exist, how much would you like to go or not to go on REFORGER? Rate your choice on a scale from 1 to 7.

- (1) ☐ Would do almost anything to avoid going.
- (2) ☐ Would put forth effort to avoid going.
- (3) ☐ Would prefer not to go, but wouldn't put forth any effort to avoid going.
- (4) ☐ No opinion - don't care at all.
- (5) ☐ Would prefer to go, but wouldn't put forth any effort to try to go.
- (6) ☐ Would put forth effort to go.
- (7) ☐ Would do almost anything to go.

Q. If you would prefer to go on REFORGER 77, what are your reasons?

\_\_\_\_\_

R. Who made the decision about your not going on REFORGER?

- (1) ☐ First Sgt
- (2) ☐ Co CO
- (3) ☐ Don't know
- (4) ☐ Other (Specify: \_\_\_\_\_)

Comments: \_\_\_\_\_

S. In your opinion who influenced this decision?

- (1) ☐ NCOIC
- (2) ☐ Sqd Ldr
- (3) ☐ Plt Sgt
- (4) ☐ Plt Ldr
- (5) ☐ 1st Sgt
- (6) ☐ Co CO
- (7) ☐ Bn Sgt Maj
- (8) ☐ Bn CO
- (9) ☐ Doctor
- (10) ☐ IG
- (11) ☐ AG
- (12) ☐ Chaplain
- (13) ☐ Don't know
- (14) ☐ Other (Specify: \_\_\_\_\_)

Reasons or comments: \_\_\_\_\_

SCHEDULE 3 - p. 3

T. If you preferred to go, did you try to have the decision changed?  
     \_\_\_ Yes \_\_\_ No

U. (If "No"): Why not? \_\_\_\_\_  
     \_\_\_\_\_  
     \_\_\_\_\_

V. (If "Yes"): Whom did you see and in what order? What was their sex?  
 What was their reaction: affirmative (1), negative (2), or other (3)?  
 What did they say?

	<u>Order/Person</u>	<u>Sex</u>	<u>React</u>	<u>Reasons/Results</u>
(1)	___ NCOIC	___	___	_____
(2)	___ Sqd Ldr	___	___	_____
(3)	___ Plt Sgt	___	___	_____
(4)	___ Plt Ldr	___	___	_____
(5)	___ 1Sgt	___	___	_____
(6)	___ Co CO	___	___	_____
(7)	___ Bn Sgt Maj	___	___	_____
(8)	___ Bn CO	___	___	_____
(9)	___ Doctor	___	___	_____
(10)	___ IG	___	___	_____
(11)	___ AG	___	___	_____
(12)	___ Chaplain	___	___	_____
(13)	___ Other	___	___	_____
	(Specify: _____)			

W. Do you think the decision about deployment in your case was fair; that is, was it the same for you as for others like you?  
 (1) \_\_\_ Yes (2) \_\_\_ No (3) \_\_\_ Don't know  
 Comments: \_\_\_\_\_  
 \_\_\_\_\_

X. Do you think that decisions about sending women and men on REFORGER were made on the same basis?  
 (1) \_\_\_ Yes (2) \_\_\_ No (3) \_\_\_ Don't know

Y. (If "No"): What differences were there? \_\_\_\_\_  
 \_\_\_\_\_

Z. What is your present marital status?  
 (1) \_\_\_ Married  
 (2) \_\_\_ Engaged  
 (3) \_\_\_ Legally separated  
 (4) \_\_\_ Never been married  
 (5) \_\_\_ Divorced or marriage annulled; not remarried  
 (6) \_\_\_ Widowed  
 Comments: \_\_\_\_\_  
 \_\_\_\_\_

AA. How many children do you have?  
 (1) \_\_\_ None (3) \_\_\_ Two  
 (2) \_\_\_ One (4) \_\_\_ Three or more

SCHEDULE 3 - p. 4

COMMENTS BY DATA COLLECTOR: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## CRITICAL INCIDENT CODES

### Item A - "Type of Incident"

1. Aggressive acts among peers
2. Insubordinate behavior
3. Criminal behavior
4. Failure to perform duties adequately
5. Emotional display
6. Indication of poor morale
7. Requirement for medical attention (non-accident)
8. Accident (injury and/or equipment damage)
9. Supervisory failure - discrimination or preferential treatment
10. Supervisory failure - abusive behavior
11. Other (describe)

### Item B - "Conditions"

- |                                    |                                |
|------------------------------------|--------------------------------|
| 1. Adverse weather                 | 5. Poor leadership             |
| 2. Poor illumination (darkness)    | 6. Inadequate information      |
| 3. Missing or inoperable equipment | 7. Very high level of activity |
| 4. Adverse Terrain                 | 8. No adverse conditions       |

### Item C - "Presumed Causes"

1. Inadequate training
2. Stress and fatigue
3. Illness
4. Personal characteristics - physical
5. Personal characteristics - other (immaturity, bad temper, etc.)
6. Other (describe)

### Item D - "Information Source"

- |   |                       |
|---|-----------------------|
| 1. Direct personal observation            | 4. Official reports   |
| 2. Second hand report from other observer | 5. Unofficial records |
| 3. Third hand account                     | 6. Other (describe)   |

REFORGER 77

PROJECT REF WAC

CRITICAL INCIDENT REPORT

REF WAC OBSERVER

1. Unit \_\_\_\_\_

2. Location \_\_\_\_\_

3. DTG \_\_\_\_\_

4. Participants (Enter Number)

	M	F
Officer		
Enlisted Supervisor		
Enlisted Soldier		

5. Description of Incident:

6. Observers Evaluation of Impact of Incident on Task Accomplishment  
(including morale):

7. Incident Classification (Use Codes from Reverse). Record as many as apply:

A. Type of Incident \_\_\_\_\_

B. Conditions \_\_\_\_\_

C. Presumed Causes \_\_\_\_\_

D. Information Source \_\_\_\_\_

8. Conclusions:

Observer: \_\_\_\_\_  
Name Grade

Observer: \_\_\_\_\_  
Signature

## Interview Schedule for NCO Debriefing

### REF WAC 77 QUESTIONS

1. In Germany during REFORGER what problems got in the way of obtaining all the data asked for in Schedule 4? Describe in detail.
2. One purpose of Schedule 4 was to obtain valid performance ratings of soldiers over a long realistic exercise. What suggestions do you have for improvement of Schedule 4 to accomplish this purpose.
3. Assume that there will be REF WAC 78. Based on your experience, how would you improve the selection, training, and management of DATA COLLECTORS?
4. One of the reasons for REF WAC 77 was to compare men and women on time lost from duty. Do the data you collected give a true picture of this? How do you think time losses can be accurately tracked?
5. Did you see any instances of NCO's or Officers giving either preferential or discriminating treatment toward women? Describe any such instances.
6. Did you see any reduction in the mission-effectiveness of a unit because of the inclusion of women soldiers? Describe any such cases.

Interview Schedule for High Performing and Low Performing  
Female Soldiers

A. ESSENTIAL STANDARD QUESTIONS

1. Can you think of anything in your past experiences that affected how well or how poorly you did during field exercises in REFORGER?

2. Can you think of any kinds of past experiences, before the Army, which you did not have, but which might have prepared you better?

3. Let's talk about the weather - in Germany - during REFORGER. How was it for you? (Then, in terms of the particular response she gives, ask how she feels about:

-adequacy of women's clothing issued for cold weather-warmth? convenience? etc.

-advance instruction about what to bring in way of clothes.

-comparison between women and men in coping with cold, inclement weather, etc.)

4. We also want to know about other things that might have affected your physical comfort, like your living conditions, working conditions, health ... Somewhere in this question, find out whether interviewee has had experience in using outdoor toilets other than in the Army, circumstances, consequences ... If with regard to any of the items in this question the interviewee raises questions or problems, probe to find how (or if) this woman coped with her problems; and if possible, how did other women cope.

5. How well do you feel you did your job? Compared to other women? Compared to men with same assignment, MOS, rank, etc.?

B. SUPPLEMENTARY ISSUES FOR INTERVIEWERS TO BE ALERT TO AND TO COMMENT ON WHERE POSSIBLE

1. Authority/autonomy dilemmas and their solutions, at any point in this soldier's life.

2. Appreciation (or lack of appreciation) for a high degree of organization in order to get the job done; know-how for functioning in a highly-organized institution? problems in fitting-in a tight organization?

3. Team work participation or indifference.

4. Hard work ethos or what is done in its absence, through avoidance, shaming, etc.

5. Tolerances - with what sort of frustration can you not put up? (physical; psychological). And did any of these occur during REFORGER?

6. Gender privileges and handicaps experienced during REFORGER and at any time in life of this soldier.

7. Coping with one's problems and dissatisfactions; e.g., skills, styles of coping.



SELF-DESCRIPTION INVENTORY

FORM A

SELF-DESCRIPTION INVENTORY

FORM A

Instructions:

The following statements are ones that people can use to describe themselves. Read each statement carefully and decide whether or not the statement describes you personally. If you think the statement does describe you, circle the letter "Y" (for "Yes"). If you think the statement does not describe you, circle the letter "N" (for "No").

- Y N 1. I haven't done much camping.
- Y N 2. I would enjoy marching in a parade.
- Y N 3. I don't like having someone tell me what to do.
- Y N 4. As a child, I had regular chores to do around the house.
- Y N 5. I wear my hair longer than most of my friends do.
- Y N 6. I played at least one team sport when I was in school.
- Y N 7. When I do not feel "up to par" physically, I am unable to do any kind of work.
- Y N 8. When I do not feel "up to par" physically, I must have bedrest.
- Y N 9. When the weather is cold and wet, I get sick easily.
- Y N 10. I do not enjoy winter sports because I get too cold and tired.
- Y N 11. I am able to get through a day even if I have had very little sleep the night before.
- Y N 12. I am not afraid of the dark.
- Y N 13. If I am away from my family for a long period of time, I become lonely and unhappy.
- Y N 14. I find new experiences exciting.
- Y N 15. I enjoy meeting new people.
- Y N 16. I enjoy traveling and do it as often as possible.
- Y N 17. I would never travel without a companion.
- Y N 18. New areas frighten me, because I can't find my way around.
- Y N 19. If I work during the day, I am too tired to work at night.
- Y N 20. Giving instructions/orders to other people makes me nervous.
- Y N 21. When I play in sport activities, I am afraid that I will get hurt.
- Y N 22. Skiing would frighten me because I would feel out of control.
- Y N 23. I think sky-diving would be a wonderful, exciting experience.
- Y N 24. I grew up in a family with many brothers.
- Y N 25. I grew up in a family with many sisters.

- Y N 26. If I had the money, I'd get my hair done (go to the beauty shop/hairdresser) every week.
- Y N 27. I don't think I'd enjoy things like ice-skating and skiing.
- Y N 28. I enjoy outdoor activities such as hiking and camping.
- Y N 29. When a situation starts going to pieces, I pitch in and try to get things straightened out.
- Y N 30. In high school, I liked math and science subjects.
- Y N 31. I find it very hard to work under strict rules and regulations.
- Y N 32. I am an active, energetic sort of person.
- Y N 33. I have worked on a farm doing outside chores.
- Y N 34. I know how to drive a truck or camper-van.
- Y N 35. I can shoot and clean a gun.
- Y N 36. Before I joined the Army I slept outdoors on the ground or in a tent at least once.
- Y N 37. I attended a summer camp while growing up.
- Y N 38. I used to play baseball, basketball, etc. with the guys when I was growing up.
- Y N 39. I have been hunting or fishing.
- Y N 40. I am unhappy if I can't take a shower every time I get sweaty.
- Y N 41. If I get cold, I don't care about my job.
- Y N 42. I always finish what I start.
- Y N 43. I enjoy being outdoors.
- Y N 44. For recreation, I prefer indoor activities.
- Y N 45. I never take the lead in a group.
- Y N 46. I have always been in good physical condition.
- Y N 47. I like challenges.
- Y N 48. I resent being given orders.
- Y N 49. My friends think that I am conscientious.
- Y N 50. I like to set goals and meet them.

(GO ON TO NEXT PAGE)

- Y N 51. I am not a very adventuresome person.
- Y N 52. I can get along with very little sleep.
- Y N 53. I have always been a good organizer.
- Y N 54. I don't like unexpected events.
- Y N 55. I make friends easily.
- Y N 56. If I were working together with someone who was willing but not able to do his/her share of our assignment, I'd be likely to take over an extra share of the burden.
- Y N 57. When I do a good job I usually get the promotion or praise I deserve.
- Y N 58. I would rather have a real tough assignment than sit around with nothing to do.
- Y N 59. As a child I was required to do regular chores.
- Y N 60. I can't stand waiting in long lines for things that I need.
- Y N 61. I don't like roughing it in bad weather.
- Y N 62. I think that it is sort of a challenge to get out in the woods and and to have jobs and experiences that I never had before.
- Y N 63. When I am frustrated, I am likely to burst into tears.
- Y N 64. You can't expect men to accept women as supervisors.
- Y N 65. Supervisors should recognize that women aren't "just one of the guys" when they give out dirty, heavy or unpleasant assignments.
- Y N 66. If women received the same amount of physical training as men do, they would be able to perform about as well in most jobs.
- Y N 67. I have usually been reasonably happy in the jobs I had.
- Y N 68. No one is going to get away with giving me orders without explaining their purpose.

(GO ON TO NEXT PAGE)

- Y N 69. When new methods of work are introduced, I am eager to try them out.
- Y N 70. I don't mind getting sweaty and dirty.
- Y N 71. I can drive a truck.
- Y N 72. Privacy has always been important to me.
- Y N 73. I am more of a doer than a thinker.
- Y N 74. I have a lot of athletic ability.
- Y N 75. I don't like people who swear and curse all the time.
- Y N 76. I have gone hiking or camping many times.
- Y N 77. I was a superior student in mathematics when I was in high school.
- Y N 78. Sometimes I get upset and cry.
- Y N 79. I like to work around heavy machinery.
- Y N 80. I have spent a lot of time on a farm.
- Y N 81. I like men as close friends.
- Y N 82. I feel uncomfortable at night in the woods.
- Y N 83. I get chilled easily in cold weather.
- Y N 84. I feel confident that I could build a good campfire.
- Y N 85. I feel uncomfortable when my hair gets wet or dirty.
- Y N 86. I like to go camping.
- Y N 87. I like to go hiking and backpacking.
- Y N 88. I don't generally wear shoes with a high heel.
- Y N 89. I get mad when people say I am not able to do something I think I can do.
- Y N 90. I feel very uncomfortable if I don't have daily access to a warm shower or bath.
- Y N 91. I can identify at least 5 different kinds of trees.
- Y N 92. I easily get blisters on my feet.

(GO ON TO NEXT PAGE)

- Y N 93. I can carry a filled knapsack on my back while hiking without having the knapsack straps hurt me.
- Y N 94. I am generally good with my hands.
- Y N 95. I am good with tools.
- Y N 96. I would like riding in a jeep.
- Y N 97. My hands and feet get cold easily.
- Y N 98. I am above average in strength for my sex.
- Y N 99. I like to go to the field.
- Y N 100. I like to eat C-Rations.
- Y N 101. I like to work outside.
- Y N 102. I like to go to the field even in cold weather.
- Y N 103. I like to read field manuals.
- Y N 104. I like to put up tents.
- Y N 105. I don't like to work outside my MOS.
- Y N 106. I don't mind working.
- Y N 107. I like to work with other people.
- Y N 108. I like to participate in sports.
- Y N 109. I don't mind sleeping on the ground.
- Y N 110. Before I joined the Army, I spent summer vacations away from home.
- Y N 111. At home, if my parents were away I could always take care of myself.
- Y N 112. I like to be in work situations where I'm allowed to do things that I've never done before.
- Y N 113. In school, I participated in more than the average number of clubs and extra curricular activities.
- Y N 114. I was an officer in some of the high school clubs I belonged to.
- Y N 115. I like to organize groups which get together for civic activities (e.g., neighborhood clean-up).

(GO ON TO NEXT PAGE)

- Y N 116. I was active in youth groups in my church or synagogue when I was in school, I was active in some religious, ethical, or other groups concerned with the meaning of life.
- Y N 117. I always worked to get elected to office in the groups where I was a member.
- Y N 118. I generally avoided getting involved in the nitty-gritty of the organizations in which I was a member.
- Y N 119. I participate in and like outdoor sports.
- Y N 120. I have been a team - member in competitive sports.
- Y N 121. I like recreation which challenges me.
- Y N 122. I have done mechanical repairs on cars.
- Y N 123. I can deal with most of the usual household problems. (rewire a lamp, replace washers on faucets, etc.)
- Y N 124. When I have free time, I like to spend it reading or listening to music.
- Y N 125. I like to gamble in card games.
- Y N 126. I need pushing to join in.
- Y N 127. I am very active when I'm with my friends.
- Y N 128. By myself, I often have trouble finding something interesting to do.
- Y N 129. I feel very shy among strangers.
- Y N 130. I feel that I'm a better than average driver.
- Y N 131. In high school, I avoided extra curricular activities like clubs and athletic teams.
- Y N 132. There are more important things in life than becoming a success.
- Y N 133. I'm uncomfortable in new and unfamiliar situations.
- Y N 134. I know I'm a good and worthwhile person.
- Y N 135. I'm usually satisfied to let someone else take the lead in group activities.

(GO ON TO NEXT PAGE)



- Y N 136. Compared to kids I grew up with, I had an unhappy childhood.
- Y N 137. If someone is wrong, I say so even if it means an argument.
- Y N 138. I enjoy telling other people about my accomplishments.
- Y N 139. For the most part I avoid taking risks, even if the outcome  
might be okay.
- Y N 140. Being well-liked is more important than being successful.
- Y N 141. On a job, I always felt sure that I could do anything that  
my boss wanted done.
- Y N 142. I like to work with my hands.
- Y N 143. I would enjoy singing in a large glee club or chorus.

(GO ON TO NEXT PAGE)

- Y N 144. If I don't think my car is repaired correctly I refuse to take it until they do it right.
- Y N 145. I'd rather drive at night in the country than on residential streets during the day.
- Y N 146. I'd like to climb Mt. Everest.
- Y N 147. While I was growing up, there was a boy my age that I was very close to.
- Y N 148. I usually know what is wrong with my car when I take it in for repairs.
- Y N 149. I took part in a lot of school activities.
- Y N 150. I have been to a summer camp.
- Y N 151. I belonged to the Girl Scouts.
- Y N 152. I have gone hiking in the woods.
- Y N 153. I used to have a tree house.
- Y N 154. I used to take part in competitive sports.
- Y N 155. Some people used to say I was a tomboy when I was growing up.
- Y N 156. I would rather wear jeans and a sweatshirt than a dress and stockings.
- Y N 157. I would rather keep my hair short than long.
- Y N 158. I prefer the "natural look" to lipstick and makeup.
- Y N 159. I would rather take a bath than clean a rifle.
- Y N 160. I just have to wash my hair at least twice a week.
- Y N 161. I don't particularly like the idea of carrying a rifle.
- Y N 162. When I have a difficult task to do, I nearly always ask for help.
- Y N 163. I was active in school sports activities.
- Y N 164. I worked part-time while I was in high school.
- Y N 165. I worked my way through school.
- Y N 166. I didn't see any point in spending time on a job I didn't like.
- Y N 167. I can get along with anybody.
- Y N 168. I had fired a rifle at least once before I came in the Army.

(GO ON TO NEXT PAGE)

- Y N 169. I started driving a car before I was 16.
- Y N 170. Being a soldier was the first full-time job I ever had.
- Y N 171. I like to travel a lot.
- Y N 172. I like the idea of working in a man's job.
- Y N 173. I enjoy bossing people around.
- Y N 174. I sometimes cry when I get upset.
- Y N 175. I have always enjoyed running.
- Y N 176. It's important to me to stay in good physical condition.
- Y N 177. I like team sports a lot.
- Y N 178. I like to work outdoors.
- Y N 179. I don't like getting grease on my hands.
- Y N 180. I don't like having to keep my room neat.
- Y N 181. I can do any job as well as a man can.

SELF - DESCRIPTION INVENTORY

FORM I

A-141

PT

## SECTION I

In this section you are to show whether you would like or dislike the following kinds of work. Consider only whether you would like to do what you think the job involves, and not whether you would be good at it. For Section I, if you circle L you will be saying that you would like the job; if you circle D you will be saying that you would dislike the job. Circle I only when you are unable to decide whether you would like or dislike the job.

- |   |   |   |                                   |
|---|---|---|-----------------------------------|
| L | D | I | 1. Librarian                      |
| L | D | I | 2. Explorer                       |
| L | D | I | 3. Amphibious tank gunner         |
| L | D | I | 4. Factory worker                 |
| L | D | I | 5. Aviator                        |
| L | D | I | 6. Typist                         |
| L | D | I | 7. Telephone switchboard operator |
| L | D | I | 8. Demolition specialist          |
| L | D | I | 9. Grocery clerk                  |
| L | D | I | 10. Artillery observer, forward   |
| L | D | I | 11. Grocery store cashier         |
| L | D | I | 12. Rifleman                      |
| L | D | I | 13. Chaplain's assistant          |
| L | D | I | 14. Supply records officer        |
| L | D | I | 15. Finance clerk                 |

GO ON TO THE NEXT PAGE.

## SECTION II

Each question in this section consists of two descriptions. You are to decide which one of the pair (A or B) is more descriptive of you and circle the letter (A or B) which corresponds to the answer you choose. You are to choose one answer out of each pair.

16. Which describes you better?  
A) will not accept discipline  
B) gloomy
17. Which describes you better?  
A) get satisfaction from social contacts  
B) get satisfaction from doing a job well
18. Which bothers you more?  
A) sand  
B) lightning
19. Which describes you better?  
A) inattentive  
B) trust no one
20. Which would you do better?  
A) keep at tedious work for long periods of time  
B) entertain relatives I dislike
21. Which describes you better?  
A) "cocky"  
B) always losing things
22. Which describes you better?  
A) find it hard to catch on to new ways of doing things  
B) bad tempered
23. Which would you like better?  
A) going to see a mystery movie  
B) going to a boxing match
24. Which would you do better?  
A) hike  
B) chop wood
25. Which describes you better?  
A) friendly  
B) cheerful

GO ON TO THE NEXT PAGE.

### SECTION III

In this section, you are to decide whether or not each statement describes how you feel or what you think. If it describes you, you would answer Yes by circling Y on your answer sheet. If it does not describe you, you would answer No by circling N on your answer sheet.

- Y N 26. Nothing gets me down for long.
- Y N 27. Most of my friends back home were my near neighbors.
- Y N 28. I like people who assume leadership.
- Y N 29. I dread the thought of an earthquake.
- Y N 30. I would like to share a room with a person who seems to know a lot.
- Y N 31. I have had periods of days, weeks, or months when I couldn't take care of things because I couldn't "get going".
- Y N 32. I think nearly anyone would tell a lie to keep out of trouble.
- Y N 33. I would report a friend who stole some money.
- Y N 34. I am good at making a camp fire.
- Y N 35. I can't take orders from someone I dislike.
- Y N 36. I'm a good shot with a rifle or shotgun.
- Y N 37. I'm slow moving.
- Y N 38. As a kid, I hung around with a street-corner gang.
- Y N 39. I have had blank spells in which my activities were interrupted and I did not know what was going on around me.
- Y N 40. I don't think about what I'm doing in a tight spot; I just try to get out as soon as possible.
- Y N 41. I can tell one kind of tree from another.
- Y N 42. I like people who always agree with you.
- Y N 43. I am pretty rugged.

GO ON TO THE NEXT PAGE.

Circle Y for Yes, This Describes Me  
Circle N for No, This Does Not Describe Me

- Y N 44. I only feel at home in a big city.
- Y N 45. I like history.
- Y N 46. I frequently get in a state of tension and turmoil when thinking over the day's happenings.
- Y N 47. Only a fool would ever vote to increase his own taxes.
- Y N 48. I am happy most of the time.
- Y N 49. The more a man talks the better I like him.
- Y N 50. Card games are fun only if there's a little money involved.
- Y N 51. I do not tire quickly.
- Y N 52. I have few or no pains.
- Y N 53. Spit-and-polish doesn't help make an army.
- Y N 54. I have a guilty conscience if I've done something I know is wrong.
- Y N 55. Most any time I would rather sit and daydream than do anything else.
- Y N 56. When someone does me a wrong I feel I should pay him back if I can, just for the principle of the thing.
- Y N 57. I drink a large amount of water every day.
- Y N 58. I would like to hunt lions in Africa.
- Y N 59. I need somebody to tell me how to do things.
- Y N 60. I am bored most of the time.
- Y N 61. I am a natural leader.
- Y N 62. Sometimes I feel as if I must injure either myself or someone else.
- Y N 63. There seems to be a fullness in my head or nose most of the time.
- Y N 64. I like arithmetic.
- Y N 65. I am in just as good physical health as most of my friends.
- Y N 66. I have never done anything dangerous for the thrill of it.



Circle Y for Yes, This Describes Me  
Circle N for No, This Does Not Describe Me

- Y N 67. I seldom make mistakes.
- Y N 68. The top of my head sometimes feels tender.
- Y N 69. When I take a new job I like to be tipped off on who should be gotten next to.
- Y N 70. Once a week or oftener I become very excited.
- Y N 71. I like men who talk intelligently.
- Y N 72. I am a pretty fast thinker.
- Y N 73. I usually drive myself steadily (I do not work by fits and starts).
- Y N 74. I get "rattled" easily.
- Y N 75. I like taking responsibility.
- Y N 76. I believe in being careful to understate my powers, leaving people to find out for themselves just how good I really am.
- Y N 77. I would like to be a cashier in a bank.
- Y N 78. I have often lost out on things because I couldn't make up my mind soon enough.
- Y N 79. When in a group of people I usually do what the others want rather than make suggestions.
- Y N 80. I like being pitted against another as in a political or athletic race.
- Y N 81. The thought of being in an automobile accident is very frightening to me.
- Y N 82. I like museums.
- Y N 83. A windstorm terrifies me.
- Y N 84. I like National Geographic Magazine.
- Y N 85. I have sometimes stayed away from another person because I feared doing or saying something I might regret afterwards.
- Y N 86. I like travel movies.

GO ON TO THE NEXT PAGE.

Circle Y for Yes, This Describes Me  
Circle N for No, This Does Not Describe Me

- Y N 87. It bothers me when something unexpected interrupts my daily routine.
- Y N 88. A criminal is not really responsible for his evil deeds since he himself is a product of so many unhappy circumstances over which he has no control.
- Y N 89. I like energetic people.
- Y N 90. I find that I have to avoid exciting situations because they fatigue me too much.
- Y N 91. I would like to be a music teacher.
- Y N 92. I keep out of trouble at all costs.
- Y N 93. I would like teaching adults.
- Y N 94. I feel weak all over much of the time.
- Y N 95. I feel quite at home in the woods or mountains.
- Y N 96. I am surefooted in rough country.
- Y N 97. I am not much good for the first hour after I wake up.
- Y N 98. I'm light on my feet.
- Y N 99. I hate to see a man file his fingernails.
- Y N 100. I don't believe in breaking my neck working.

#### SECTION IV

For each question in this section there are five words or phrases describing people. For questions 101 through 107 you are to pick the word or phrase that describes you LEAST. For questions 108 through 125 you are to pick the word or phrase that describes you MOST. Read each question carefully to see which you are asked to do. Circle OUT ONLY ONE LETTER FOR EACH QUESTION.

101. Which describes you LEAST?  
A) calm  
B) critical  
C) daredevil  
D) look on all sides of a question  
E) quick in stride
102. Which describes you LEAST?  
A) booster  
B) happy  
C) look on all sides of a question  
D) quiet  
E) well-bred
103. Which describes you LEAST?  
A) liberal with money  
B) look on all sides of a question  
C) religiously exact  
D) respectful  
E) smooth in movements
104. Which describes you LEAST?  
A) quick  
B) sincere  
C) take orders without question  
D) thoughtful  
E) well-bred
105. Which describes you LEAST?  
A) like to be with others  
B) precise  
C) retiring in a group  
D) sarcastic  
E) stingy
106. Which describes you LEAST?  
A) callous  
B) jolly  
C) never on time  
D) overenthusiastic  
E) see through at a glance
107. Which describes you LEAST?  
A) absent-minded  
B) awkward  
C) never forget  
D) overtire myself  
E) serious-minded
108. Which describes you MOST?  
A) accept discipline  
B) argumentative  
C) rarely worry  
D) rough in manner  
E) sober-minded
109. Which describes you MOST?  
A) modest  
B) patient  
C) self-critical  
D) smooth in movements  
E) willful
110. Which describes you MOST?  
A) happy-go-lucky  
B) inactive  
C) see through at a glance  
D) sulky  
E) witty

111. Which describes you MOST?

- A) absent-minded
- B) awkward
- C) never forget
- D) overtire myself
- E) serious-minded

112. Which describes you MOST?

- A) absent-minded
- B) accept discipline
- C) quiet
- D) sunny in disposition
- E) superstitious

113. Which describes you MOST?

- A) ambitious
- B) booster
- C) jolly
- D) leader
- E) rarely worry

114. Which describes you MOST?

- A) behave consistently
- B) lack self-confidence
- C) not submissive
- D) pinch pennies
- E) quick in stride

115. Which describes you MOST?

- A) at ease in a group
- B) long suffering
- C) openhanded with money
- D) put duty before pleasure
- E) underestimate

116. Which describes you MOST?

- A) inattentive
- B) merry
- C) pinch pennies
- D) relaxed
- E) restless

117. Which describes you MOST?

- A) bossy
- B) fret at delay
- C) punctual
- D) shy with everyone
- E) well-bred

118. Which describes you MOST?

- A) accommodating
- B) high in spirits
- C) put duty before pleasure
- D) usually composed
- E) witty

119. Which describes you MOST?

- A) absent-minded
- B) bashful
- C) look on all sides of a question
- D) play it safe
- E) stand up for my rights

120. Which describes you MOST?

- A) attractive
- B) carefree
- C) friendly
- D) levelheaded
- E) matter-of-fact

121. Which describes you MOST?

- A) accept discipline
- B) believe in luck
- C) hard
- D) sympathetic
- E) tender

122. Which describes you MOST?

- A) lead the group
- B) obedient
- C) rash
- D) shy with everyone
- E) work at high tension

123. Which describes you MOST?
- A) accept discipline
  - B) carry a rabbit-foot  
(or other lucky-piece)
  - C) consider myself lucky
  - D) entertaining
  - E) work at high tension

124. Which describes you MOST?
- A) analyze myself
  - B) leader
  - C) lighthearted
  - D) take orders without  
question
  - E) well-bred

125. Which describes you MOST?
- A) forceful
  - B) inconsistent in behavior
  - C) keep in background
  - D) modest
  - E) superstitious

END

### SELF-RATINGS OF PERFORMANCE

Last September you spent about ten days in the field as part of a REFORGER exercise in Europe. We would like to ask you some questions about the various jobs you were given to do on this exercise. First, we would like to know how well you think you did on your regular job (whatever that was) and also how well you think you did on any non-MOS assignments (for example, guard duty, KP, etc.) that you had. We'll start with the regular job you had while you were on REFORGER.

1. First, what kind of work did you do on REFORGER? In other words, what was the job called, and what did it require you to do? (Please write your answer in the space below).

2. Second, how well do you think you did on that job while you were in the field? Read the statements below and circle the number that best indicates how well you think you think you did. (NOTE: THIS IS A PRIVATE RATING, TO BE USED FOR RESEARCH PURPOSES ONLY. IT WILL NOT GET INTO YOUR ARMY RECORDS IN ANY WAY).

Self-Rating of Regular Job Performance on REFORGER (Private)

RATING	DESCRIPTION OF PERFORMANCE
7	I performed all tasks in a superior manner; equivalent to the performance of an outstanding soldier
6	I performed most tasks in a superior manner, all others at minimum standards; equivalent to the performance of superior soldier
5	I performed some tasks in a superior manner, all others at minimum standards; equivalent to the performance of an excellent soldier
4	I performed all tasks at minimum standards; equivalent to the performance of an average soldier
3	I performed most tasks at minimum standards; some tasks were failed; equivalent to the performance of a marginal soldier
2	I performed a few tasks at minimum standards but most were failed; equivalent to the performance of an unsatisfactory soldier
1	I performed all tasks in an inferior manner; performance so poor that if I always performed this way you would question my MOS qualification

3. What kind of non-MOS duty assignments (for example, guard duty, KP, etc.) did you have? Please write your answer in the space below.

4. How well do you think you did on these assignments? As before, read the statements and circle the number that best indicated how well you think you did.



Self-Rating of Non-MOS-Duty Performance (Private)

RATING	DESCRIPTION OF PERFORMANCE
7	I performed all tasks in a superior manner; equivalent to the performance of an outstanding soldier
6	I performed most tasks in a superior manner, all others at minimum standards; equivalent to the performance of superior soldier
5	I performed some tasks in a superior manner, all others at minimum standards; equivalent to the performance of an excellent soldier
4	I performed all tasks at minimum standards; equivalent to the performance of an average soldier
3	I performed most tasks at minimum standards; some tasks were failed; equivalent to the performance of a marginal soldier
2	I performed a few tasks at minimum standards but most were failed; equivalent to the performance of an unsatisfactory soldier
1	I performed all tasks in an inferior manner; performance so poor that if I always performed this way you would question my MOS qualification

As you may know, your work in the field was rated by your supervisors every day (or almost every day). We would like your opinion as to how these supervisors rated you -- both on your regular job and on your non-MOS duties. We'll start with your regular job.

5. What would you guess was the average rating you received on your job during REFORGER? Circle one of the numbers below.

Opinion of How My Job Performance was Rated by My Supervisors (Private)

RATING	DESCRIPTION OF PERFORMANCE
7	Performed all tasks in a superior manner; equivalent to the performance of an outstanding soldier
6	Performed most tasks in a superior manner, all others at minimum standards; equivalent to the performance of superior soldier
5	Performed some tasks in a superior manner, all others at minimum standards; equivalent to the performance of an excellent soldier
4	Performed all tasks at minimum standards; equivalent to the performance of an average soldier
3	Performed most tasks at minimum standards; some tasks were failed; equivalent to the performance of a marginal soldier
2	Performed a few tasks at minimum standards but most were failed; equivalent to the performance of an unsatisfactory soldier
1	Performed all tasks in an inferior manner; performance so poor that if the indi always performed this way you would question his/her MOS qualification

6. Do you happen to know how your supervisor rated you on this?

A) Yes

B) No

7. What about your non-MOS assignments (guard duty, KP, etc.). How do you think you were rated on these?

Opinion of How My Non MOS-Duty Performance was Rated by My Supervisors (Private)

RATING	DESCRIPTION OF PERFORMANCE
7	Performed all tasks in a superior manner; equivalent to the performance of an outstanding soldier
6	Performed most tasks in a superior manner, all others at minimum standards; equivalent to the performance of superior soldier
5	Performed some tasks in a superior manner, all others at minimum standards; equivalent to the performance of an excellent soldier
4	Performed all tasks at minimum standards; equivalent to the performance of an average soldier
3	Performed most tasks at minimum standards; some tasks were failed; equivalent to the performance of a marginal soldier
2	Performed a few tasks at minimum standards but most were failed; equivalent to the performance of an unsatisfactory soldier
1	Performed all tasks in an inferior manner; performance so poor that if the individual always performed this way you would question his/her MOS qualification

8. Do you happen to know how your supervisors rated you on this?

A) Yes

B) No

Now we'd like you to imagine something. Imagine that your fellow soldiers had been asked to rate your performance during REFORGER. If they had been asked to rate your performance (honestly), how do you think they would have rated you? We'll start with regular jobs.

9. If your fellow soldiers had rated your regular job performance during REFORGER, what rating do you think most of them would have given you?

Guess as to How My Fellow Soldiers Would Have Rated My Regular Job Performance

(Private)

RATING	DESCRIPTION OF PERFORMANCE
7	Performed all tasks in a superior manner; equivalent to the performance of an outstanding soldier
6	Performed most tasks in a superior manner, all others at minimum standards; equivalent to the performance of superior soldier
5	Performed some tasks in a superior manner, all others at minimum standards; equivalent to the performance of an excellent soldier
4	Performed all tasks at minimum standards; equivalent to the performance of an average soldier
3	Performed most tasks at minimum standards; some tasks were failed; equivalent to the performance of a marginal soldier
2	Performed a few tasks at minimum standards but most were failed; equivalent to the performance of an unsatisfactory soldier
1	Performed all tasks in an inferior manner; performance so poor that if the indi always performed this way you would question his/her MOS qualification

10. How do you think your fellow soldiers would have rated your performance on your non-MOS duties?



Guess as to How My Fellow Soldiers Would Have Rated My Non-MOS-Duty Performance  
(Private)

RATING	DESCRIPTION OF PERFORMANCE
7	Performed all tasks in a superior manner; equivalent to the performance of an outstanding soldier
6	Performed most tasks in a superior manner, all others at minimum standards; equivalent to the performance of superior soldier
5	Performed some tasks in a superior manner, all others at minimum standards; equivalent to the performance of an excellent soldier
4	Performed all tasks at minimum standards; equivalent to the performance of an average soldier
3	Performed most tasks at minimum standards; some tasks were failed; equivalent to the performance of a marginal soldier
2	Performed a few tasks at minimum standards but most were failed; equivalent to the performance of an unsatisfactory soldier
1	Performed all tasks in an inferior manner; performance so poor that if the indi always performed this way you would question his/her MOS qualification

11. How well did you understand the job you were assigned on REFORGER?
- A) Well enough
  - B) Not so well as I would have liked
  - C) Not well at all
12. Did you have most of the materials or equipment you needed for the job?
- A) Yes
  - B) No
13. Would you say your training for this job was adequate, or would you say it was inadequate?
- A) Adequate
  - B) Inadequate

This is the end of the questionnaire. Thank you for your help.

August 1977

WOMEN IN THE ARMY - REFORGER 77

ARI INSTRUCTIONS FOR

CHOOSING A MATCHING SAMPLE OF MALE SOLDIERS FOR THE FEMALE SOLDIERS

IN EACH COMPANY

PURPOSE:

The Company data-collector sergeant will be tasked to observe REFORGER 77 and collect specified information such as loss of time from work, reasons for time loss, etc. For each woman soldier categorized "deployable-and-going" to REFORGER, the data collector will also gather similar information on a "matching" man soldier. The purpose of these instructions is to explain the procedure for selecting this matching group of male soldiers. This selection will occur at Ft. Riley.

DATA SOURCE:

The preferred data source is the file of Personnel Data Cards. If these are not available, then turn to the DA Form 2-1. If these are not available, the company Personnel Qualification Report will have to be used. Using the PQR would make the selection process more complicated and would require some changes in the selection procedures outlined below; in this case, telephone Dr. Sophia F. McDowell or Dr. Laurel Oliver - Autovon 284-8613.

CHARACTERISTICS TO BE MATCHED:

The matching male group should be as similar as possible to the deployable-and-going-on-REFORGER women in the characteristics which are listed below in order of their importance:

1. Pay grade
2. Length of service (+ or - 3 months)
3. PMOS

4. DMOS, same as woman's PMOS
5. SMOS, same as woman's PMOS
6. Year of birth (+ or - 2 years)
7. GT score

PROCEDURE:

Start with the company list of women soldiers who are "deployable-and-going on REFORGER 77." Take one woman's Personnel Data Card (or form 2 if necessary) at a time. To match her with a male who is also "deployable-and-going on REFORGER 77" take the following steps:

1. Pull the data cards (or forms) for all males with the same pay grade as that of the subject EW.

2. From this pile of cards/forms, pull only those in the same length-of-service (+ or - 3 months). Put aside remaining cards.

3. Take the cards of those within the same length-of-service range; and pull those with the same PMOS; put aside the remaining cards.

- 3a. If there is no man with a matching PMOS in the pile you are working with, then look for one whose DMOS is the same as the woman's PMOS.

- 3b. If there is not man with a DMOS which matches the woman's PMOS, then look for one whose SMOS matches the woman's PMOS.

- 3c. If there is still no man with an MOS match, select one within the same career management field as the woman's PMOS.

4. When you have matched on MOS as instructed above and put aside the non-matching cards, take the last matching pile and pull those cards within the two-year DOB range; put aside all remaining cards.

5. Take those within the same DOB range and pull those with the closest GT score. By this time a selection will have been made. Hold out the matched

pair; record on the list of matching deployables. All other cards/forms that have been put aside can now be reassembled in the alphabetical file.

6. Select the next woman's card/form and repeat the matching process.

7. Repeat the whole process again until a male match has been chosen for each woman who is to go on REFORGER 77.

Example: Sharon Brown's record indicates the following:

1. Pay grade: E4
2. Length of service: 2 years, 7 months
3. PMOS: 95B
4. DOB: 2 June 1954
5. GT Score: 114

There are 33 males with the same pay grade; of these 33, there are 14 with the same length of service; of these 14, there may be 10 with the same PMOS. In this case however, there might be no men whose PMOS matches; but there may be 5 whose DMOS match the woman's PMOS. From those 5 you will go on to DOB. Or, there might be no man whose DMOS matches the woman's PMOS, but 3 whose SMOS matches the woman's PMOS. From these 3 you will go on to DOB, and select the one whose DOB is closest to hers. From this final group select the man whose GTS is most similar. This is your matched man! If at any step in the above process, you cannot find an exact match then you must select a man from the previous step who appears closest.

#### RECORDING THE INFORMATION THE MATCHED PAIRS OF FEMALE/MALE SOLDIERS

When you have paired each of the REFORGER females with a male similar to her on the criteria outlined above, record your information on these pairs on a sheet for each company. A sample form is attached to help you get started. Please let Dr. Sophia McDowell know how the system works for you, (Telephone -

Autovon 284-8613; or address your branch chief in writing, marking the communication ATTN: Dr. McDowell.) If there are problems in following this procedure, Dr. McDowell may need to revise it. By the time that Dr. McDowell arrives at Ft. Riley on or about August 15, the battalion data collectors should have the matching list for each company ready for her review, and for use by the company data collectors.

#### IN CASE THE MATCHING MALE DROPS OUT

For various unpredictable reasons, a male who has been carefully selected as the matching cohort for a woman soldier going on Reforger, may have to drop out at the last minute. To deal with this situation, an alternate male should also be chosen for each deployable-and-going female, using the same instructions as were given for the original male cohort.

#### IN CASE THE DEPLOYABLE-AND-GOING FEMALE DROPS OUT

For various unpredictable reasons, a female who has been carefully selected for Reforger 77, may have to drop out at the last minute. To deal with this situation, stand-by females should also be designated as possible deployables, and for each stand-by female a male cohort should be chosen, using the same instructions as were given for the original male cohort.

MATCHING FEMALE/MALE DEPLOYABLES GOING ON REFORGER 77

5

Pair #	Sex	Last	N A M E First M. Initial	Pay Grade	Length of Service	PMOS	DMOS	SMOS	Yr. of Birth	GT3
1	F									
1	M									
2	F									
2	M									
3	F									
3	M									
4	F									
4	M									
5	F									
5	M									
6	F									
6	M									
7	F									
7	M									
8	F									
8	M									
9	F									
9	M									
10	F									
10	M									

Table B-1

**GROUP EVENT RATINGS FOR HIGH STRESS COMPANIES:<sup>a</sup>**  
**AVERAGES FOR MALE AND MIXED GROUPS BY TIME PERIOD FOR EACH TYPE OF UNIT**

Type of Unit		Beginning 3 Days		Middle 3 Days		End 4 Days		Total	
		N	Average	N	Average	N	Average	N	Average
Maintenance	Male	5	4.3	3	4.7	1	3.0	9	4.3
	Mix	12	5.3	3	5.3	13	5.3	28	5.3
	Tot	17	5.0	6	5.0	14	5.1	37	5.0
Medical	Male	20	4.9	9	5.4	25	5.0	54	5.0
	Mix	10	4.4	2	2.0	12	4.6	24	4.3
	Tot	30	4.7	11	4.8	37	4.9	78	4.8
Mil Police	Male	4	5.0	8	4.5	3	4.2	15	4.6
	Mix	13	4.2	10	5.0	3	4.0	26	4.5
	Tot	17	4.4	18	4.8	6	4.1	41	4.5
Signal	Male	3	4.7	4	6.5	5	6.2	12	5.9
	Mix	33	4.2	29	7.1	34	6.0	96	5.7
	Tot	36	4.2	33	7.1	39	6.0	108	5.7
Supply & Trans.	Male								
	Mix								
	Tot								
No company met high stress criterion.									
All Units	Male	32	4.8	24	5.2	34	5.1	90	5.0
	Mix	68	4.4	44	*6.3	62	5.5	174	5.3
	Tot	100	4.5	68	5.9	96	5.3	264	5.2

**Note.** Averages are based upon adjusted ratings (performance rating plus conditions score).

<sup>a</sup> Companies which changed location during FTX.

\* Statistically significant at 5% level.



Table B-2

**GROUP EVENT RATINGS FOR LOW STRESS COMPANIES:<sup>a</sup>**  
**AVERAGES FOR MALE AND MIXED GROUPS BY TIME PERIOD FOR EACH TYPE OF UNIT**

Type of Unit		Beginning 3 Days		Middle 3 Days		End 4 Days		Total	
		N	Average	N	Average	N	Average	N	Average
Maintenance	Male	7	4.1	9	5.4	3	4.7	19	4.8
	Mix	35	4.5	33	5.2	56	4.8	124	4.8
	Tot	42	4.4	42	5.2	59	4.8	143	4.8
Medical	Male	10	4.5	2	5.0	8	4.8	20	4.7
	Mix	38	4.8	11	5.3	49	4.6	98	4.8
	Tot	48	4.8	13	5.2	57	4.6	118	4.8
Mil Police	Male	1	4.0	6	5.8	8	5.9	15	5.7
	Mix	11	4.9	5	6.0	21	5.5	37	5.4
	Tot	12	4.8	11	5.9	29	5.6	52	5.5
Signal	Male	9	4.1	2	4.0	1	4.0	12	4.1
	Mix	23	4.2	9	3.7	11	3.7	43	4.0
	Tot	32	4.2	11	3.8	12	3.7	55	4.0
Supply & Trans.	Male	26	4.8	14	4.5	24	4.8	64	4.7
	Mix	52	5.1	31	5.1	41	4.9	124	5.0
	Tot	78	5.0	45	4.9	65	4.9	188	4.9
All Units	Male	53	4.5	33	5.0	44	5.0	130	4.8
	Mix	159	4.7	89	5.1	178	4.8	426	4.8
	Tot	212	4.7	122	5.0	222	4.8	556	4.8

Note. Averages are based upon adjusted ratings (performance rating plus conditions score).

<sup>a</sup> Companies which did not change location during FTX.

Table B-3

**GROUP EVENT RATINGS FOR UNIQUE TASKS:<sup>a</sup>**  
**AVERAGES FOR MALE AND MIXED GROUPS BY TIME PERIOD AND TYPE OF UNIT**

Type of Unit	Group	Pre-FTX		Beginning		Middle		End		Total	
		N	Avg	N	Avg	N	Avg	N	Avg	N	Avg
Maint	Male	0	-	8	4.5	5	4.7	4	4.3	17	4.5
	Mix	0	-	15	4.5	12	5.0	19	4.5	46	4.6
Medical	Male	21	5.2	20	4.8	11	5.4	25	5.4	77	5.2
	Mix	24	5.6	29	5.2	9	5.7	44	5.2	106	5.3
Mil Police	Male	2	5.3	2	5.0	7	5.6	7	6.2	18	5.8
	Mix	17	5.5	7	4.8	8	5.6	15	5.4	47	5.4
Signal	Male	4	5.8	5	5.2	5	6.0	5	6.2	19	5.8
	Mix	25	5.5 <sup>*</sup>	26	4.4	20	6.9	37	5.5	108	5.5
Supply & Trans	Male	5	3.4	12	4.8	7	4.0	20	4.7	44	4.5
	Mix	18	4.2	22	5.0	10	*5.4	27	4.7	77	4.7
Total	Male	32	5.0	47	4.8	35	5.1	61	5.2	175	5.1
	Mix	84	5.2	99	4.8	59	*5.9	142	5.1	384	5.2

**Note.** Averages are based upon adjusted ratings (performance rating plus conditions score).

<sup>a</sup> MOS-related tasks, unique to type of unit

\* Statistically significant at the 5% level.

Table B-4

**GROUP EVENT RATINGS FOR COMMON TASKS:<sup>a</sup>**  
**AVERAGES FOR MALE AND MIXED GROUPS BY TIME PERIOD AND TYPE OF UNIT**

Type of Unit	Group	Pre-FTX		Beginning		Middle		End		Total	
		N	Avg	N	Avg	N	Avg	N	Avg	N	Avg
Maint	Male	0	-	4	3.5	7	5.5	0	-	11	4.8
	Mix	1	3.0	32	4.7	24	5.3	50	5.0	107	5.0
Medical	Male	3	3.5	10	4.7	0	-	8	3.7	21	4.1
	Mix	5	4.1	19	4.0	4	2.8	17	3.2	45	3.6
Mil Police	Male	0	-	3	4.7	7	4.4	4	4.1	14	4.4
	Mix	10	4.8	17	4.4	7	5.0	9	5.0	43	4.7
Signal	Male	0	-	7	3.6	1	4.0	1	4.0	9	3.7
	Mix	3	5.3	30	4.0	18	5.8	8	4.8	59	4.7
Supply & Trans	Male	0	-	14	4.8	7	5.0	4	5.3	25	4.9
	Mix	3	5.3	30	5.1	21	5.0	14	5.4	68	5.1
Total	Male	3	3.5	38	4.4	22	4.9	17	4.2	80	4.5
	Mix	22	4.7	128	4.5	74	5.1	98	4.7	322	4.7

**Note.** Averages are based upon adjusted ratings (performance rating plus conditions score).

<sup>a</sup> Sustenance and tactical tasks common across all units

Table B-5

**INDIVIDUAL EVENT RATINGS:**  
**AVERAGES OF MATCHED<sup>a</sup> EM AND EW, SHOWN BY TIME PERIOD AND TYPE OF UNIT**

Type of Unit	Group	Pre-FTX		Beginning		Middle		End		Total	
		N	Average	N	Average	N	Average	N	Average	N	Average
Maintenance	EM	1	5.0	26	4.6	13	5.1	26	5.2	66	4.9
	EW		5.0		4.9		5.5		4.9		5.0
Medical	EM	9	4.3	17	4.2	2	4.0	25	4.3	53	4.3
	EW		4.7		4.4		4.0		4.5		4.5
Military Police	EM	17	6.0	19	5.6	15	5.0	23	5.2	74	5.4
	EW		5.6		5.4		5.6		5.7		5.5
Signal	EM	42	5.0	26	4.8	21	5.9	44	5.0	133	5.1
	EW		4.5		4.4		6.0		5.0		4.9
Supply & Trans	EM	5	5.0	35	5.5	23	6.3	14	6.1	77	5.8
	EW		5.0		5.7		6.2		6.2		6.0
Total	EM	74	5.1	123	5.0	74	5.6	132	5.1	403	5.2
	EW		4.8		5.0		5.8		5.1		5.2

Note. Averages are based upon adjusted ratings (performance rating plus environment score).

<sup>a</sup> Each observation of an EW was paired with an observation of an EM on same event, same time period, with same MOS (if possible), and by same rater.

Table B-6

INDIVIDUAL EVENT RATINGS FOR HIGH STRESS COMPANIES:<sup>a</sup>  
 AVERAGES OF MATCHED<sup>b</sup> EM AND EW, SHOWN BY TIME PERIOD AND TYPE OF UNIT

Type of Unit	Group	Pre-FTX		Beginning		Middle		End		Total	
		N	Avg	N	Avg	N	Avg	N	Avg	N	Avg
Maintenance	EM	1	5.0	9	4.3	2	6.0	11	5.1	23	4.9
	EW	1	5.0	9	4.9	2	5.0	11	5.0	23	5.0
Medical	EM	3	4.7	5	5.0	1	3.0	6	4.9	15	4.7
	EW	0	0	2	6.0	2	4.0	4	5.3	8	5.1
Military Police	EM	1	6.0	6	6.0	6	4.7	9	4.9	22	5.2
	EW	1	5.0	6	4.4	6	4.8	9	5.2	22	4.9
Signal	EM	21	5.4	16	5.2	20	6.0	27	5.4	84	5.5
	EW	21	5.0	16	4.8	20	6.1	27	5.6	84	5.4
Supply & Trans.	EM	No company met high stress criterion.									
	EW										
Total	EM	26	5.3	36	5.1	29	5.6	53	5.2	144	5.3
	EW	23	5.0	33	4.8	30	5.6	51	5.4	137	5.2

Note. Averages are based upon adjusted ratings (performance rating plus environment score).

<sup>a</sup> Companies which moved location during FTX.

<sup>b</sup> Each observation of an EW was paired with an observation of an EM on same event, same time period, with same MOS (if possible), and same rater.

Table B-7

INDIVIDUAL EVENT RATINGS FOR LOW STRESS COMPANIES:<sup>a</sup>  
 AVERAGES OF MATCHED<sup>b</sup> EM AND EW, SHOWN BY TIME PERIOD AND TYPE OF UNIT

Type of Unit	Group	Pre-FTX		Beginning		Middle		End		Total	
		N	Avg	N	Avg	N	Avg	N	Avg	N	Avg
Maintenance	EM	0	0	17	4.8	11	5.0	15	5.2	43	5.0
	EW	0	0	17	4.9	11	5.5	15	4.9	43	5.1
Medical	EM	6	4.2	12	3.9	1	5.0	19	4.2	38	4.1
	EW	9	4.7	15	4.2	0	0	21	4.4	45	4.4
Military Police	EM	16	5.9	13	5.4	9	5.2	14	5.4	52	5.5
	EW	16	5.6	13	5.8	9	6.1	14	6.0	52	5.8
Signal	EM	21	4.5	10	4.2	1	4.0	17	4.4	49	4.4
	EW	21	4.0	10	3.7	1	2.0	17	4.1	49	3.9
Supply & Trans	EM	5	5.0	35	5.5	23	6.2	14	6.1	77	5.8
	EW	5	5.0	35	5.7	23	6.2	14	6.2	77	5.9
Total	EM	48	5.0	87	5.0	45	5.6	79	5.0	259	5.1
	EW	51	4.7	90	5.1	44	5.9	81	5.0	266	5.1

Note. Averages are based upon adjusted ratings (performance rating plus environment score).

<sup>a</sup> Companies which did not move during FTX.

<sup>b</sup> Each observation of an EW was paired with an observation of an EM on same event, same time period, with same MOS (if possible), and same rater.

\*\* Statistically significant at the 1% level.

Table B-8

INDIVIDUAL EVENT RATINGS FOR COMMON TASKS:<sup>a</sup>  
 AVERAGES OF MATCHED<sup>b</sup> EM AND EW, SHOWN BY TIME PERIOD AND TYPE OF UNIT

Type of Unit	Group	Pre-FTX		Beginning		Middle		End		Total	
		N	Avg	N	Avg	N	Avg	N	Avg	N	Avg
Maint	EM	0	-	19	4.7	13	5.1	16	5.0	48	4.9
	EW	0	-	19	5.1	13	5.5	16	4.6	48	5.0
Medical	EM	7	4.6	8	4.8	0	-	19	4.9	34	4.8
	EW	7	4.9	8	4.6	0	-	19	4.9	34	4.8
Mil Police	EM	17	5.9	11	5.7	10	4.9	17	5.1	55	5.5
	EW	17	5.6	11	4.9	10	5.0	17	5.3	55	5.2
Signal	EM	34	4.9	22	4.8	13	6.4	44	5.1	113	5.1
	EW	34	4.4	22	4.5	13	6.3	44	5.0	113	4.8
Supply & Trans	EM	0	-	9	4.9	5	6.1	3	6.5	17	5.5
	EW	0	-	9	5.7	5	6.2	3	6.5	17	6.0
Total	EM	58	5.2	69	4.9	41	5.6	99	5.1	267	5.1
	EW	58	4.8	69	4.9	41	5.7	99	5.0	267	5.0

Note. Averages are based upon adjusted ratings (performance rating plus environment score).

<sup>a</sup> Sustenance and tactical tasks common across all units.

<sup>b</sup> Each observation of an EW was paired with an observation of an EM, on same event, same time period, with same MOS (if possible) and by same rater.

\* Statistically significant at the 5% level.

Table B-9

INDIVIDUAL EVENT RATINGS FOR UNIQUE TASKS:<sup>a</sup>  
AVERAGES OF MATCHED<sup>b</sup> EM AND EW, SHOWN BY TIME PERIOD AND TYPE OF UNIT

Type of Unit	Group	Pre-FTX		Beginning		Middle		End		Total	
		N	Avg	N	Avg	N	Avg	N	Avg	N	Avg
Maint	EM	1	5.0	7	4.4	0	-	10	5.5	18	5.1
	EW	1	5.0	7	4.4	0	-	10	5.5	18	5.1
Medical	EM	2	3.5	9	3.7	2	4.0	6	2.4	19	3.3
	EW	2	4.0	9	4.2	2	4.0	6	3.4	19	3.9
Mil Police	EM	0	-	8	5.4	5	5.3	6	5.3	19	*{5.3
	EW	0	-	8	6.1	5	6.7	6	6.6	19	*{6.4
Signal	EM	8	5.3	4	5.0	8	5.1	0	-	20	5.2
	EW	8	5.1	4	4.0	8	5.3	0	-	20	5.0
Supply & Trans	EM	5	5.0	26	5.7	18	6.3	11	6.0	60	5.9
	EW	5	5.0	26	5.7	18	6.2	11	6.1	60	5.9
Total	EM	16	4.9	54	5.1	33	5.7	33	5.1	136	5.2
	EW	16	4.9	54	5.2	33	5.9	33	5.5	136	5.4

**Note.** Averages are based upon adjusted ratings (performance rating plus environment score).

<sup>a</sup> MOS-related tasks, unique to type of unit.

<sup>b</sup> Each observation of EW was paired with an observation of an EM, on same event, same time period, with same MOS (if possible), and same rater.

\* Statistically significant at 5% level.



Table B-10

INDIVIDUAL EVENT RATINGS GROUPED BY THE TYPE OF MOS:  
AVERAGES OF MATCHED<sup>a</sup> EM AND EW, SHOWN BY TIME PERIOD

Type of MOS	Group	Pre-FTX		Beginning		Middle		End		Total	
		N	Average	N	Average	N	Average	N	Average	N	Average
Clerical (3 types of units)	EM	3	6.0	2	5.3	1	5.0	3	6.0	9	5.7
	EW	3	6.0	2	5.5	1	6.0	3	5.7	9	5.8
Cook (5 types of units)	EM	11	4.9	39	5.3	31	5.8	31	5.0	112	5.3
	EW	11	4.9	39	5.4	31	5.9	31	5.5	112	5.5
Supply (3 types of units)	EM	2	3.5	30	4.7	12	5.6	8	5.6	52	* {5.0
	EW	2	3.5	30	5.2	12	6.1	8	5.4	52	* {5.4
Telecom (1 unit)	EM	7	5.3	9	5.3	11	6.5	19	5.8	46	5.8
	EW	7	4.6	9	5.0	11	6.4	19	5.8	46	5.6
Multchan (1 unit)	EM	25	4.8	13	4.4	1	8.0	24	4.5	63	* {4.7
	EW	25	4.3	13	4.1	1	8.0	24	4.4	63	* {4.3
Radio TT (1 unit)	EM	2	4.0	0		1	4.0	1	4.0	4	4.0
	EW	2	4.0	0		1	4.0	1	4.0	4	4.0
Truck Dr (1 unit)	EM	0		5	5.2	1	5.0	0		6	5.2
	EW	0		5	5.0	1	5.0	0		6	5.0
Power Eq. (1 unit)	EM	0		2	5.3	2	5.6	3	4.3	7	5.0
	EW	0		2	4.3	2	4.3	3	4.0	7	4.2
Auto Rep (1 unit)	EM	0		3	4.2	3	5.0	4	4.8	10	4.7
	EW	0		3	4.9	3	5.4	4	4.8	10	5.0
Field Rad (1 unit)	EM	0		3	4.7	1	4.0	5	5.7	9	5.1
	EW	0		3	4.7	1	5.0	5	4.9	9	4.8
Med/Dnt (1 unit)	EM	7	4.6	6	4.7	0		17	4.8	30	4.7
	EW	7	4.9	6	4.3	0		17	4.8	30	4.7
MP Med (1 unit)	EM	17	5.9	5	5.2	6	4.3	8	5.2	36	5.4
	EW	17	5.6	5	5.2	6	4.7	8	5.6	36	5.4
MP Light (1 unit)	EM	0		6	6.2	4	5.6	9	5.1	19	5.6
	EW	0		6	4.6	4	5.5	9	5.1	19	5.0
Total	EM	74	5.1	123	5.0	74	5.6	132	5.1	403	5.2
	EW	74	4.8	123	5.0	74	5.8	132	5.1	403	5.2

**Note.** Averages are based upon adjusted ratings (performance rating plus environment score).

<sup>a</sup> Each observation of an EW was paired with an observation of an EM, on same event, same time period, with same MOS (if possible) and by same rater.

\* Statistically significant at the 5% level.

Table B-11

INTERCORRELATIONS OF DAILY PERFORMANCE AND INDIVIDUAL EVENT RATINGS  
ACROSS TIME PERIODS FOR MALES ONLY

	(1)	(2)	(3)	(4)	(5)	(6)
(1) Daily Performance Beginning	1.00	.79** (186)	.74** (183)	.02 (31)	.41 (20)	.28 (37)
(2) Daily Performance Middle		1.00	.87** (187)	.01 (30)	.04 (23)	.09 (37)
(3) Daily Performance End			1.00	.09 (29)	.02 (22)	.21 (35)
(4) Individual Event Beginning				1.00	.47** (33)	.56** (47)
(5) Individual Event Middle					1.00	.63** (38)
(6) Individual Event End						1.00

Note. Number of cases upon which correlation coefficient is based is shown in parenthesis below coefficient.

\*\* Statistically significant at the 1% level.

Table B-12

INTERCORRELATION OF DAILY PERFORMANCE AND INDIVIDUAL EVENT RATINGS  
ACROSS TIME PERIODS FOR FEMALES ONLY

	(1)	(2)	(3)	(4)	(5)	(6)
(1) Daily Performance Beginning	1.00	.80** (174)	.71** (174)	.39** (67)	.21 (44)	.24 (66)
(2) Daily Performance Middle		1.00	.84** (174)	.44** (65)	.20 (44)	.25* (64)
(3) Daily Performance End			1.00	.36** (65)	.15 (42)	.22 (67)
(4) Individual Event Beginning				1.00	.52** (40)	.58** (50)
(5) Individual Event Middle					1.00	.81** (40)
(6) Individual Event End						1.00

Note. Number of cases upon which correlation coefficient is based is shown in parentheses below coefficient.

\* Statistically significant at the 5% level.

\*\* Statistically significant at the 1% level.

Table B-13

"HOW WELL DO YOU THINK THE ENLISTED MEN/WOMEN IN YOUR COMPANY  
WILL DO/DID THEIR JOBS DURING REFORGER?"  
(in %)

UNIT DEFENSE AND HOUSEKEEPING JOBS								
Response Alternatives	(PRETEST)				(POSTTEST)			
	How well men will do		How well women will do		How well men did		How well women did	
	OFF (N=130)	NCO (N=426)	OFF (N=122)	NCO (N=385)	OFF (N=147)	NCO (N=487)	OFF (N=135)	NCO (N=429)
Excellent/Good	82	78	53	50	78	77	56	47
Fair	16	18	30	34	18	16	28	26
Poor/Very Poor	2	4	17	16	3	7	16	27

OTHER JOBS								
Response Alternatives	(PRETEST)				(POSTTEST)			
	How well men will do		How well women will do		How well men did		How well women did	
	OFF (N=130)	NCO (N=425)	OFF (N=121)	NCO (N=380)	OFF (N=149)	NCO (N=491)	OFF (N=139)	NCO (N=429)
Excellent/Good	92	81	76	61	93	83	70	50
Fair	8	17	19	25	7	13	22	28
Poor/Very Poor	0	2	5	14	0	4	8	21

Table B-14

"HOW WELL DO YOU THINK THE ENLISTED MEN/WOMEN IN YOUR  
"EVERYDAY WORK GROUP" (EWG) AND YOU YOURSELF  
WILL DO/DID THEIR/YOUR JOBS DURING REFORGER?"  
(IN %)

	Unit Defense and Housekeeping Jobs											
	PRETEST					POSTEST						
	How well men will do EM	How well women will do EM <sup>a</sup>	How well self will do EM	How well men did EM	How well women did EM <sup>a</sup>	How well self did EM	How well men did EM	How well women did EM <sup>a</sup>	How well self did EM	How well self did EM		
Response Alternatives	(N=1435)	(N=180)	(N=179)	(N=1441)	(N=182)	(N=1524)	(N=198)	(N=930)	(N=1536)	(N=201)		
Excellent-Good	69	74	41	73	76	69	74	69	32	78	79	80
Fair	24	21	34	21	20	24	19	19	30	17	18	16
Poor-Very poor	6	5	25	6	4	7	7	12	38	5	4	3
<u>Other Jobs</u>												
	PRETEST					POSTEST						
	How well men will do EM	How well women will do EM <sup>a</sup>	How well self will do EM	How well men will do EM	How well self will do EM	How well men did EM	How well women did EM <sup>a</sup>	How well self did EM	How well self did EM	How well self did EM	How well self did EM	How well self did EM
Response Alternatives	(N=1434)	(N=181)	(N=845)	(N=180)	(N=1443)	(N=184)	(N=1552)	(N=205)	(N=938)	(N=197)	(N=1553)	(N=206)
Excellent-Good	75	77	49	83	79	82	78	69	35	82	81	80
Fair	20	20	34	14	18	15	16	21	30	14	16	17
Poor-Very poor	4	3	18	3	3	3	5	10	35	4	3	3

<sup>a</sup> Responses of those who chose alternatives other than "There are no women in my EWG" and "Don't know".

Table B-15

## WORK AVAILABILITY

NUMBER OF OCCURRENCES AND AVERAGE DAILY HOURS  
ACCORDING TO TYPE OF AVAILABILITY BY TIME PERIOD

(Average Daily Hours in Parenthesis Under Number of Occurrences)

Type of Availability	Time Periods										Total
	Pre-FTX		Begin		Middle		End				
	M	F	M	F	M	F	M	F	M	F	
Assigned hours	482 (11.7)	482 (10.8)	557 (12.5)	572 (11.7)	562 (11.8)	561 (11.0)	529 (11.9)	537 (11.3)	2130 (12.0)	2152 (11.2)	
Accident	0	1 ( $\leq .1$ )	0	0	0	0	0	0	0	1 ( $\leq .1$ )	0
AWOL	2 ( $\leq .1$ )	0	1 ( $\leq .1$ )	0	0	0	0	0	3 ( $\leq .1$ )	0	0
Disciplinary action	1 ( $\leq .1$ )	1 ( $\leq .1$ )	0	1 ( $\leq .1$ )	0	7 ( $\leq .1$ )	1 ( $\leq .1$ )	12 (.2)	2 ( $\leq .1$ )	21 (.1)	
Sick call	3 (.1)	14 (.3)	2 ( $\leq .1$ )	8 (.2)	0	8 (.3)	2 ( $\leq .1$ )	3 ( $\leq .1$ )	7 ( $\leq .1$ )	33 (.2)	
Sick in quarters	2 ( $\leq .1$ )	12 (.4)	1 ( $\leq .1$ )	7 (.2)	2 ( $\leq .1$ )	10 (.2)	2 (.1)	18 (.4)	7 ( $\leq .1$ )	47 (.3)	
Special duty	19 (.5)	31 (.7)	24 (.4)	53 (.8)	21 (.4)	34 (.5)	11 (.1)	19 (.3)	75 (.4)	137 (.6)	
Other	6 (.2)	13 (.4)	11 (.2)	16 (.2)	16 (.3)	24 (.4)	5 (.1)	11 (.2)	38 (.2)	64 (.3)	

Table B-16

"DURING THE LAST MONTH, HOW MANY  
TIMES DID YOU GO ON SICK CALL?"  
(in %)

Response Alternatives	PRETEST		POSTTEST	
	EM (N=1514)	EW (N=194)	EM (N=1583)	EW (N=209)
Not at all	69	44	76	55
Once	16	30	15	24
Twice	9	17	6	12
Three or more times	6	9	3	8

Table B-17

"WHO GO ON SICK CALL MORE OFTEN?" (PRETEST)  
 "WHO WENT ON SICK CALL MORE OFTEN DURING REFORGER 77?" (POSTTEST)  
 (IN %)

Response Alternatives	PRETEST				POSTTEST			
	OFF (N=125)	NCO (N=429)	EM (N=1491)	EW (N=188)	OFF (N=131)	NCO (N=457)	EM (N=1439)	EW (N=192)
Enlisted men	19	32	23	36	13	20	13	38
Enlisted women	30	27	30	17	26	26	30	10
No difference	50	41	46	47	61	54	57	53



Table B-18

MOS IN REF WAC 77:  
ASSESSMENT OF DIFFICULTY FOR AVERAGE FEMALE  
BECAUSE OF PHYSICAL REQUIREMENTS

MOS	Title	Test Directorate Assessment	ARI Supplemental Questionnaire			
			Officer		NCO	
			N	%	N	%
05C	Radio Teletype Operator	2	12	0	50	10
05E	Voice Radio Operator	2	15	13	39	5
05F	Radio Teletype Operator (Non-Morse)	2	20	10	57	5
26B	Weapons Support Radio Repairman	1	11	36	18	50
26C	Combat Area Surveillance Radar Repairman	1	28	32	72	26
31B	Field Communications-Electronics Equipment Repairman	1	27	15	63	8
31E	Field Radio Repairman	2	44	25	95	25
31G	Tactical Communications Chief	1				
31J	Teletypewriter Repairman	2	56	20	145	17
31L	Multichannel Communications-Electronics Repairman	1	16	56	23	48
31M	Multichannel Communications Equipment Operator	2	12	8	50	62
31N	Tactical Circuit Controller	2	12	0	50	8
31S	Field General Communications Security Repairman	2	16	19	23	22
31T	Field Systems Communications Security Repairman	2	16	13	5	30
31U	Tactical Communications Security Maintenance Supervisor	1				

Note. N = Total number of respondents

% = Checked MOS as having physical problems for EW

Table B-18 (cont'd)

MOS	Title	Test Directorate Assessment	ARI Supplemental Questionnaire			
			Officer		NCO	
			N	%	N	%
31W	Tactical Electronics Main- tenance Chief	1				
34B	Tabulating Equipment Repair- man	1				
34G	Fire Control Computer Repairman	1	24	21	55	15
34J	Univac System Repairman		11	0	50	32
35B	Electronic Instrument Repairman	1	24	0	55	11
35D	Meteorological Equipment Repairman	1				
35E	Special Electrical Devices Repairman	1	34	6	78	14
35G	Biomedical Equipment Repairman	1	13	46	15	33
36C	Telephone Installer/Lineman	3	12	100	50	86
36G	Manual Central Office Repairman	2	44	5	95	8
36K	Tactical Wire Operations/Field Switchboard Operator	2	91	46	192	40
41B	Topographic Instrument Repair- man	1	7	0	23	9
41C	Fire Control Instrument Repair- man	1	24	13	77	13
41E	Camera Repairman	1	16	0	23	9
41J	Office Machine Repairman	1	7	0	23	9
41K	Reproduction Equipment Repair- man	1				
42E	Optical Lab Specialist	1				
43M	Fabric Repairman	1	20	15	60	13

Table B-18 (cont'd)

MOS	Title	Test Directorate Assessment	ARI Supplemental Questionnaire			
			Officer		NCO	
			N	%	N	%
44B	Metal Worker	2	30	60	83	52
44E	Machinist	1	30	37	83	39
45B	Small Arms Repairman	2	24	8	77	9
45K	Tank Turrett Repairman	2	11	45	40	48
45L	Artillery Repairman	2	24	63	77	51
51A	Construction/Utilities Worker	2	5	100	18	72
51B	Carpenter		6	67	6	50
51L	Heating and Cooling Specialist	1	24	29	77	14
52B	Power Generation Equipment Operator/Mechanic	2	147	56	361	51
52C	Power Pack Specialist		13	54	37	41
52D	Power Generation Equipment Mech	2	24	38	77	27
54D	Chemical Equipment Repairman	1	24	4	77	7
54E	Chemical Staff Specialist	1	13	8	15	20
62B	Engineer Equipment Repairman	2	30	60	83	54
62F	Crane Operator	2	17	59	46	39
62M	Rough Terrain Forklift & Loader Operator	2	17	53	30	60
63B	Wheeled Vehicle Mechanic	2	104	75	232	68
63C	Track Vehicle Mechanic	2	38	74	100	73
63F	Recovery Specialist	2	48	79	119	67
63G	Fuel & Electric Systems Repair- man	1	30	17	83	15
63H	Automotive Repairman	2	30	60	83	52

Table B-18 (cont'd)

MOS	Title	Test Directorate Assessment	ARI Supplemental Questionnaire			
			Officer		NCO	
			N	Z	N	Z
63J	Quartermaster Light Equipment/ Repairman	2	51	24	129	27
64C	Motor Transport Operator/ Truckmaster	2	52	42	111	33
71B	Clerk-Typist	1	114	2	260	2
71C	Stenographer		11	0	50	0
71D	Legal Clerk	1	24	0	65	0
71G	Medical Records Clerk	1	18	0	30	7
71L	Administrative Specialist	1	30	7	72	0
71M	Chaplain's Assistant	1	19	0	57	2
71N	Traffic Management Coordinator	1	11	9	15	20
71Q	Information Specialist	1				
72C	Central Office Switchboard Operator	2	12	0	50	6
72E	Telecommunications Center Specialist	2	42	7	86	5
74B	Card and Tape Writer	1	38	0	100	1
74D	Computer/Machine Operator		11	9	50	6
74F	Program/Analyst		11	0	50	2
75B	Unit Clerk	1	139	1	320	3
75C	Personnel Management Specialist		11	0	50	0
75E	Personnel Actions Specialist		11	0	50	0
76D	Materiel Supplyman	1	119	20	253	22
76J	Medical Supplyman	2	13	38	15	40
76P	Stock Control Supplyman	1	62	16	157	18

Table B-18 (cont'd)

MOS	Title	Test Directorate Assessment	ARI Supplemental Questionnaire		NCO	
			Officer N	%	N	%
76V	Storage Supplyman	1	39	41	96	26
76W	Petroleum Supply Specialist	2	11	45	24	50
76X	Subsistence Supplyman	2	11	36	24	38
761	Unit Supply/Armorer	1	139	19	320	22
81A	General Draftsman	1	8	0	7	0
81B	Construction Draftsman	1				
83F	Offset Pressman		11	0	50	4
84B	Still Photographer	1	16	0	23	4
84C	Motion Picture Photographer	1	16	0	23	4
84G	Photo Lab Specialist	1	16	0	23	0
91B	Medical Specialist	2	18	33	30	27
91C	Clinical Specialist	1	18	0	30	13
91D	Operating Room Specialist	1	18	6	30	27
91E	Dental Specialist	1	18	6	30	17
91G	Behavioral Science Specialist	1	18	0	30	3
91H	Orthopedic Specialist	1	13	23	15	13
91P	X-ray Specialist	1	13	6	30	33
91Q	Pharmacy Specialist	1	18	0	30	7
91S	Preventive Medicine Specialist	1	13	0	15	0
92B	Medical Laboratory Specialist	1	18	0	30	10
92C	Petroleum Laboratory Specialist	1	19	11	31	10
94B	Food Service Specialist	1	112	10	268	9
95B	Military Policeman	2	25	40	98	44

Table B-19

NUMBER OF OFFICERS AND NCO'S CHECKING MOS AS PHYSICALLY TOO DEMANDING  
FOR THE AVERAGE FEMALE

MOS	Military Police				TOTAL N		TOTAL PERCENT	
	1st MP CO OFF	NCO	All Other MP CO OFF	NCO	OFF	NCO	OFF	NCO
31B			5	11	5	11	36%	23%
34J	0	16			0	16	0	32%
36K			4	17	4	17	29%	35%
52B	6	34	5	17	11	51	44%	52%
63B			9	27	9	27	64%	56%
71B	1	0	0	0	1	0	4%	0
71C	0	0			0	0	0	0
71D	0	0			0	0	0	0
71L	0	0			0	0	0	0
71M	0	1			0	1	0	2%
74B	0	0			0	0	0	0
74D	1	3			1	3	9%	6%
74F	0	1			0	1	0	2%
75B	0	1	0	0	0	1	0	1%
75C	0	0			0	0	0	0
75E	0	0			0	0	0	0
76D			0	11	0	11	0	23%
76P	4	14			4	14	36%	28%
76Y	6	22	2	5	8	27	32%	28%
83F	0	2			0	2	0	4%
94B	3	5	0	2	3	7	12%	7%
95B	8	32	2	11	10	43	40%	44%
TOTAL BY COMPANY	11	50	14	48	25	98		

Table B-20

NUMBER OF OFFICERS AND NCO'S CHECKING MOS AS PHYSICALLY TOO DEMANDING  
FOR THE AVERAGE FEMALE

MOS	1st Supply & Transportation Battalion						3rd Supply & Transportation Battalion						TOTAL PERCENT			
	HQ CO OFF	HQ CO NCO	CO A OFF	CO A NCO	CO B OFF	CO B NCO	HQ CO OFF	HQ CO NCO	CO A OFF	CO A NCO	CO B OFF	CO B NCO	TOTAL N OFF	TOTAL N NCO	OFF	NCO
36K	7	7	2	10			9	10	2	4			20	31	65%	55%
52B			6	8	6	3			2	2	4	8	18	21	67%	40%
62M			5	12					3	6			8	18	73%	75%
63B	8	16							1	7	8	13	17	36	74%	78%
63C									3	5	8	18	11	23	79%	79%
63F	9	10											15	23	83%	64%
63J			4	7	3	4			0	3	1	6	8	20	30%	39%
64C			5	3	5	7			0	2			10	12	56%	36%
71B	0	1	0	0			0	0	0	0			0	1	0	2%
71L							0	0					0	0	0	0
71N							1	3					1	3	9%	2%
75B	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1%
76D			2	5	1	2	0	0	0	2	0	3	3	12	8%	18%
76P			1	1			3	5					4	6	24%	21%
76V			4	9					0	3			4	12	36%	50%
76W			3	10					2	2			5	12	45%	50%
76X			1	6					3	3			4	9	36%	38%
76Y	3	5	2	2	1	0	3	8	0	0	0	1	9	16	19%	19%
92C			1	2					0	0			1	2	9%	8%
94B	2	3					2	1					4	4	20%	13%
TOTAL	9	17	6	14	7	9	11	15	5	10	9	19	47	84		
BY COMPANY																

Table B-21

NUMBER OF OFFICERS AND NCO'S CHECKING MOS AS PHYSICALLY TOO DEMANDING  
FOR THE AVERAGE FEMALE

MOS	1st Medical Battalion							
	HQ & A		CO C		TOTAL N		TOTAL PERCENT	
	OFF	NCO	OFF	NCO	OFF	NCO	OFF	NCO
31B	4	5			4	5	31%	33%
35G	6	5			6	5	46%	33%
52B	10	14	4	14	14	28	78%	93%
54E	1	3			1	3	8%	20%
63B	13	14	5	15	18	29	100%	97%
71B	0	0					0	0
71D	0	0					0	0
71G	0	1	0	1	0	2	0	7%
75B	0	1	0	1	0	2	0	7%
76D	6	9	3	8	9	17	50%	57%
76J	5	6			5	6	38%	40%
76Y	5	7	2	12	7	19	39%	63%
91B	3	3	3	5	6	8	33%	27%
91C	0	2	0	2	0	4	0	13%
91D	0	2	1	6	1	8	6%	27%
91E	1	1	0	4	1	5	6%	17%
91G	0	1	0	2	0	3	0	10%
91H	3	2			3	2	23%	13%
91P	0	3	1	7	1	10	6%	33%
91Q	0	1	0	1	0	2	0	7%
91S	0	0					0	0
92B	0	1	0	2	0	3	0	10%
94B	2	2	1	4	3	6	17%	20%
TOTAL BY COMPANY	13	15	5	15	18	30		



Table B-22

NUMBER OF OFFICERS AND NCO'S CHECKING MOS AS PHYSICALLY TOO DEMANDING  
FOR THE AVERAGE FEMALE

121st Signal Battalion												
MOS	HQ CO		CO A		CO B		CO C		TOTAL N		TOTAL PERCENT	
	OFF	NCO	OFF	NCO	OFF	NCO	OFF	NCO	OFF	NCO	OFF	NCO
05C			0	2	0	2	0	1	0	5	0	10%
05E			0	0			0	1	0	1	0	3%
05F			0	1	0	2	0	0	0	3	0	6%
31E	7	12							7	12	44%	52%
31J	8	10	0	1	0	2	0	3	8	16	29%	22%
31L	9	11							9	11	56%	48%
31M			0	11	0	12	1	8	1	31	8%	62%
31N			0	3	0	1	0	0	0	4	0	8%
31S	3	5							3	5	19%	22%
31T	2	7							2	7	13%	30%
36C			2	17	5	13	5	13	12	43	100%	86%
36G	2	5							2	5	13%	22%
36K	12	13							12	13	75%	57%
41E	0	2							0	2	0	9%
51A					5	13			5	13	100%	72%
52B	12	13	2	14	5	10	2	10	21	47	75%	64%
72C			0	0	0	2	0	1	0	3	0	6%
72E	2	0	0	1	0	1	0	1	2	3	7%	4%
84B	0	1							0	1	0	4%
84C	0	1							0	1	0	4%
84G	0	0							0	0	0	0
TOTAL BY COMPANY	16	23	2	17	5	18	5	15	28	73		

Table B-21

NUMBER OF OFFICERS AND NCO'S CHECKING MOS AS PHYSICALLY TOO DEMANDING  
FOR THE AVERAGE FEMALE

1st Medical Battalion								
MOS	HQ & A		CO C		TOTAL N		TOTAL PERCENT	
	OFF	NCO	OFF	NCO	OFF	NCO	OFF	NCO
31B	4	5			4	5	31%	33%
35G	6	5			6	5	46%	33%
52B	10	14	4	14	14	28	78%	93%
54E	1	3			1	3	8%	20%
63B	13	14	5	15	18	29	100%	97%
71B	0	0					0	0
71D	0	0					0	0
71G	0	1	0	1	0	2	0	7%
75B	0	1	0	1	0	2	0	7%
76D	6	9	3	8	9	17	50%	57%
76J	5	6			5	6	38%	40%
76Y	5	7	2	12	7	19	39%	63%
91B	3	3	3	5	6	8	33%	27%
91C	0	2	0	2	0	4	0	13%
91D	0	2	1	6	1	8	6%	27%
91E	1	1	0	4	1	5	6%	17%
91G	0	1	0	2	0	3	0	10%
91H	3	2			3	2	23%	13%
91P	0	3	1	7	1	10	6%	33%
91Q	0	1	0	1	0	2	0	7%
91S	0	0					0	0
92B	0	1	0	2	0	3	0	10%
94B	2	2	1	4	3	6	17%	20%
TOTAL BY COMPANY	13	15	5	15	18	30		
B-25								

Table B-22

NUMBER OF OFFICERS AND NCO'S CHECKING MOS AS PHYSICALLY TOO DEMANDING  
FOR THE AVERAGE FEMALE

121st Signal Battalion												
MOS	HQ CO		CO A		CO B		CO C		TOTAL N		TOTAL PERCENT	
	OFF	NCO	OFF	NCO	OFF	NCO	OFF	NCO	OFF	NCO	OFF	NCO
05C			0	2	0	2	0	1	0	5	0	10%
05E			0	0			0	1	0	1	0	3%
05F			0	1	0	2	0	0	0	3	0	6%
31E	7	12							7	12	44%	52%
31J	8	10	0	1	0	2	0	3	8	16	29%	22%
31L	9	11							9	11	56%	48%
31M			0	11	0	12	1	8	1	31	8%	62%
31N			0	3	0	1	0	0	0	4	0	8%
31S	3	5							3	5	19%	22%
31T	2	7							2	7	13%	30%
36C			2	17	5	13	5	13	12	43	100%	86%
36G	2	5							2	5	13%	22%
36K	12	13							12	13	75%	57%
41E	0	2							0	2	0	9%
51A					5	13			5	13	100%	72%
52B	12	13	2	14	5	10	2	10	21	47	75%	64%
72C			0	0	0	2	0	1	0	3	0	6%
72E	2	0	0	1	0	1	0	1	2	3	7%	4%
84B	0	1							0	1	0	4%
84C	0	1							0	1	0	4%
84G	0	0							0	0	0	0
TOTAL BY COMPANY	16	23	2	17	5	18	5	15	28	73		

Table B-23  
NUMBER OF OFFICERS AND NCO'S CHECKING MOS AS PHYSICALLY TOO DEMANDING  
FOR THE AVERAGE FEMALE

MOS	1st Maintenance Battalion						701st Maintenance Battalion						TOTAL PERCENT	
	HQ		124		586 & 22		HQ & LT		CO B		CO D		TOTAL N	
	OFF	NCO	OFF	NCO	OFF	NCO	OFF	NCO	OFF	NCO	OFF	NCO	OFF	NCO
05E	2	1											2	1
05F	2	0											2	0
26B					4	7	4	9			1	3	4	9
26C					2	3	2	6			0	3	9	19
31E													4	12
31J					2	1	1	5			0	2	3	8
34G					3	3	2	5					5	8
35B					0	3	0	3					0	6
35D													0	0
35E			0	1	0	3	2	6			0	1	2	11
36G					0	2	1	3			0	1	0	3
36K	2	3					1	6	2	5	1	2	6	16
41B									0	2	0		0	2
41C					2	3			1	5	0	2	3	10
41J									0	2			0	2
43M					1	5			2	3			3	8
44B			3	3	7	22			6	13	2	5	18	43
44E			2	2	6	19			1	8	2	3	11	32
45B					2	5			0	1	0	1	2	7
45K									3	15	2	4	5	19
45L					8	20			4	15	3	4	15	39
51B			4	3									4	3
51L					6	7			1	3	0	1	7	11
52B	3	2	1	2	4	12	5	14	3	5	2	1	18	36
52C					7	15							7	15

Table B-23 (cont'd)

NUMBER OF OFFICERS AND NCO'S CHECKING MOS AS PHYSICALLY TOO DEMANDING  
FOR THE AVERAGE FEMALE

MOS	1st Maintenance Battalion					701st Maintenance Battalion					TOTAL N		TOTAL PERCENT	
	HQ	124	586 & 22	CO D	CO B	HQ & LT	CO B	CO D	OFF	NCO	OFF	NCO	OFF	NCO
52D			3	13										
54D			1	2										
62B			6	21										
62F			4	5										
62M			3	4										
			1	0										
63B	6	5	3	2	7	25	11	13						
63C			9	27										
63F			5	9	26									
63G			2	1	3	6								
63H			3	2	8	23								
63J			3	9										
64C			1	3	5	12								
71B	1	0	0	1	0	0	5	8						
71L	2	0	0				0	1						
71M	0	0												
72E	1	0	0	1										
74B	0	0	0	1	0									
75B	1	0	0	1	0									
76D	2	2	2	1	4		0	5						
76P		1	0	1	2		1	5						
76V			3	3										
76Y	1	1	0	1	0		8	7						
81A	0	0	0					3						
92C	1	1												
94B	0	1	1	0			0	2						
TOTAL N	8	7	6	6	13	37	11	18	7	23	4	17	49	108
BY COMPANY														

Table B-24  
 ASSIGNMENTS TO COMPANY MTOE:  
 1st MAINTENANCE BATTALION  
 HEADQUARTERS AND HEADQUARTERS COMPANY

Respondents	Type of MOS	Authorized Strength	Instruction: Female		Female Increment (10% to 35%) (q=6)		Instruction: Female Male 35% 50% (q=9) (q=13) (q=9)		Male Increment (10% to 35%) (q=6)		Instruction: Male 10% (q=3)	
			$E_p$	0	$E_{ip}$	0	$E_{ic}$	0	$E_{ip}$	0	$E_{ic}$	0
Officers (N=8)	MOS Most Demanding Physically (63B)	1	.1	.0			.1	.1*	.9*	.3	.1* 1.9	.1 *
	MOS Least Demanding Physically (71M, 74B, 81A)	3	.3	.5	.8	.5	1.3	1.0	1.4	.5*		.3
MCO's (N=7)	MOS Most Demanding Physically (63B)	1	.1	.1			.4	.4	.9*	.3	.4 1.2	.1
	MOS Least Demanding Physically (71M, 74B, 81A)	3	.3	.0	.8	.4	.0	.4*	.9	.7		.3

B-29

NOTE: Total authorized strength for MTOE = 27

\* Indicates that the difference between the observed value (0) and the value expected under the proportionality hypothesis,  $E$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{ip}$  and 0 or between 0 and  $E_{ic}$ . If located between  $E_{ip}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{ip}$ ; if located between 0 and  $E_{ic}$ , the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from  $E_{ic}$ .

Table B-25  
 ASSIGNMENTS TO COMPANY MTOE:  
 1st MAINTENANCE BATTALION  
 124th MAINTENANCE COMPANY

Respondents	Type of MOS	Authorized Strength	Instruction: Female 10% (q=20)		Female Increment (10% to 35%) (q=50)		Instruction: Female 35% 50% 35% (q=70) (q=100) (q=70)		Male Increment (10% to 35%) (q=50)		Instruction: Male 10% (q=20)				
			$E_p$	0	$E_{ip}$	0	$E_{ic}$	0	$E_{ip}$	0	$E_{ic}$	0			
Officers (N=6)	MOS Most Demanding Physically (51B, 62B, 72E, 74B, 75B, 76Y, 94B)	25	2.5 *	.8	3.8	3.1	9.3	6.8	6.9	1.7*	6.3	8.0	15.0	2.5 *	6.0
	MOS Least Demanding Physically (35E, 71B, 72E, 74B, 75B, 76Y, 94B)	15	1.5	3.7										1.5	0.0
MCO's (N=6)	MOS Most Demanding Physically (51B, 62B, 62F, 63F)	25	2.5	1.7				4.6*	7.3*	12.7	6.3	6.9	14.5	2.5 *	5.8
	MOS Least Demanding Physically (35E, 71B, 72E, 74B, 75B, 76Y, 94B)	15	1.5 *	6.0	3.8	2.4*	15.0	8.4*	8.7	4.1				1.5	1.2

NOTE: Total authorized strength for MTOE = 200

\* Indicates that the difference between the observed value (0) and the value expected under the proportionality hypothesis,  $E_p$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{ip}$  and 0 or between 0 and  $E_{ic}$ . If located from  $E_{ip}$ ; if located between 0 and  $E_{ic}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different is significantly different from  $E_{ic}$ .

Table B-26  
 ASSIGNMENTS TO COMPANY MTOE:  
 1st MAINTENANCE BATTALION  
 586th and 22nd MAINTENANCE COMPANIES

Respondents	Type of MOS	Instruction: Female			Female Increment (10% to 35%)			Instruction: Female			Female Increment (10% to 35%)			Instruction: Male		
		Authorized Strength	Female 10% (q=14)	$E_p$ 0	$E_{ip}$ 0	$E_{ic}$	Female 35% (q=50)	Female 50% (q=72)	Female 35% (q=50)	Female 50% (q=72)	Female 35% (q=50)	Male 10% (q=14)	$E_p$ 0	$E_{ip}$ 0	$E_{ic}$	Male 10% (q=14)
Officers (N=13)	MOS Most Demanding Physically (45L, 63C, 63F, 63H)	32	3.2	*	.2			.5*	3.3*	8.9*	8.0	5.9	7.7	3.2	2.8	
	MOS Least Demanding Physically (71B, 74B, 75B, 76Y)	8	.8	*	2.7	2.0	3.2	6.2	5.7*	4.3	.6*			.8	0.0	
MCO's (N=37)	MOS Most Demanding Physically (45L, 63C, 63F, 63H)	32	3.2	*	.3			2.2*	4.2*	6.4	8.0	4.1	5.7	3.2	2.2	
	MOS Least Demanding Physically (71B, 74B, 75B, 76Y)	8	.8	*	3.2	2.0	* 1.4	* 7.9	4.6*	6.0*	.6*			.8	.1	

NOTE: Total authorized strength for MTOE = 144

\* Indicates that the difference between the observed value (0) and the value expected under the proportionality hypothesis,  $E_p$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{ip}$  and 0 or between 0 and  $E_{ic}$ . If located between  $E_{ip}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{ip}$ ; if located between 0 and  $E_{ic}$ , the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from  $E_{ic}$ .



Table B-27  
 ASSIGNMENTS TO COMPANY MTOE:  
 701st MAINTENANCE BATTALION  
 HEADQUARTERS & LIGHT COMPANY

Respondents	Type of MOS	Authorized Strength	Instruction: Female		Instruction: Female Increment		Instruction: Female Male		Instruction: Male Increment		Instruction: Male	
			$E_p$	0	$E_{ip}$	0	$E_{ic}$	0	$E_{ip}$	0	$E_{ic}$	0
Officers (N=11)	MOS Most Demanding Physically (52B, 63B, 76V)	12	1.2 *	.8			3.1*	4.2*	3.1*	3.0 *	2.0	2.8
											1.2 *	1.0
MOS Least Demanding Physically (35B, 71B, 75B, 94B)		9	.9 *	3.0	2.3 *	3.5 *	7.1		6.2*	6.6*	.7*	
											.9 *	.2
NCO's (N=18)	MOS Most Demanding Physically (52B, 63B, 76V)	12	1.2 *	.7					1.4*	3.4*	3.8*	3.0 *
												2.5
MOS Least Demanding Physically (35B, 71B, 75B, 94B)		9	.9 *	4.5	2.3	1.2 *	11.9		6.0*	6.2*	1.5*	4.0
											.9	.6

NOTE: Total authorized strength for MTOE = 72

\* Indicates that the difference between the observed value (0) and the value expected under the proportionality hypothesis,  $E_p$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{ip}$  and 0 or between 0 and  $E_{ic}$ . If located between  $E_{ip}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{ip}$ ; if located between 0 and  $E_{ic}$ , the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from  $E_{ic}$ .

Table B-28

ASSIGNMENTS TO COMPANY MTOE:  
701st MAINTENANCE BATTALION  
B COMPANY

Respondents	Type of MOS	Authorized Strength	Instruction: Female		Female Increment (10% to 35%)		Instruction: Female 35% 50% 35% (q=63) (q=91) (q=63)		Male Increment (10% to 35%)		Instruction: Male	
			$E_p$	0	$E_{ip}$	0	$E_{ic}$	0	$E_{ip}$	0	$E_p$	0
Officers (N=7)	MOS Most Demanding Physically (44B, 45L, 62B, 63C, 63F)	38	3.8	*	.1				7.5*	9.7*	16.6	
									9.5	9.4	17.9	
											3.8	7.7
NCO's (N=23)	MOS Least Demanding Physically (41B, 41J, 71B, 75B, 76Y, 76D, 45B, 54D)	19	1.9		5.3				11.3*	11.4	4.0*	
									4.8	*	7.5	9.6
											1.9	*
	MOS Most Demanding Physically (44B, 45L, 62B, 63C, 63F)	38	3.8	*	1.0				8.0*	11.9*	12.9*	
									9.5	7.2	*	14.2
											3.8	6.2
	MOS Least Demanding Physically (41B, 41J, 71B, 75B, 76Y, 76D, 45B, 54D)	19	1.9	*	5.9				7.2	8.0	3.0*	
									4.8	*	1.5	*14.3
											1.9	*
												.8

NOTE: Total Authorized strength for MTOE = 181

\* Indicates that the difference between the observed value (0) and the value expected under the proportionality hypothesis,  $E_p$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{ip}$  and 0 or between 0 and  $E_{ic}$ . If located between  $E_{ip}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{ip}$ ; if located between 0 and  $E_{ic}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{ic}$ .

Table B-29  
 ASSIGNMENTS TO COMPANY MTOE:  
 701st MAINTENANCE BATTALION  
 D COMPANY

Respondents	Type of MOS	Authorized Strength	Instruction: Female		Instruction: Female		Instruction: Female		Instruction: Male		Instruction: Male	
			$E_p$	0	$E_{1p}$	0	$E_{1c}$	0	$E_{1p}$	0	$E_{1c}$	0
Officers (N=4)	MOS Most Demanding Physically (63C, 63F, 63H)	52	3.8	* 2.3					12.3*	24.8	22.0	3.8 6.5
	MOS Least Demanding Physically (35E, 36C, 45B, 51L, 54D, 76P, 76Y, 75B, 94B)	22	1.9	5.0	4.8	6.0	12.5	10.9	13.0	3.5*	1.9 *	.3
NCO's (N=15)	MOS Most Demanding Physically (63C, 63F, 63H)	52	3.8	* 2.4					23.3	35.9*	31.5*	3.8 6.3
	MOS Least Demanding Physically (35E, 36C, 45B, 51L, 54D, 76P, 76Y, 75B, 94B)	22	1.9	* 5.2	4.8	1.6	* 11.0	6.2	5.6*	1.3*	1.9	1.7

NOTE: Total authorized strength for MTOE = 150

\* Indicated that the difference between the observed value (0) and the value expected under the proportionality hypothesis,  $E_p$  for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{1p}$  and 0 or between 0 and  $E_{1c}$ . If located between  $E_{1p}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{1p}$ ; if located between 0 and  $E_{1c}$ , the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from  $E_{1c}$ .

Table B-30

ASSIGNMENTS TO COMPANY MTOE:  
1st MEDICAL BATTALION  
HEADQUARTERS & A COMPANY

Respondents	Type of MOS	Authorized Strength	Instruction: Female		Female Increment (10% to 35%) $E_{ip}$ 0 $E_{ic}$	Instructions: Female		Male Increment (10% to 35%) $E_{ip}$ 0 $E_{ic}$	Instruction: Male
			$E_p$	$E_q$		35% (q=36)	50% (q=52)		10% (q=10)
Officers (N=13)	MOS Most Demanding Physically (63B, 52B, 76D, 35G, 76J, 76Y)	22	2.2	*	.6	3.3*	5.5*	5.5	2.2 *
						13.5*		7.3 *	15.4
									2.2 *
MCO's (N=15)	Most Least Demanding Physically (71B, 71D, 71G, 75B, 91G, 91Q, 91S, 92B)	22	2.2	*	4.3	12.0*	16.6*		2.2 *
									.7
B-35	MOS Most Demanding Physically (63B, 52B, 76D, 35G, 76J, 76Y)	22	2.2	*	1.2	4.7*	6.3*	5.5 *	2.2 *
						13.8*		8.6	12.9
									2.2 *
	MOS Least Demanding Physically (71B, 71D, 71G, 75B, 91G, 91Q, 91S, 92B)	22	2.2	*	4.6	11.7*	13.9*		2.2 *
									1.3

NOTE: Total authorized strength for MTOE = 103

\* Indicates that the difference between the observed value (0) and the value expected under the proportionality hypothesis,  $E_{ip}$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{ip}$  and 0 or between 0 and  $E_{ic}$ . If located between  $E_{ip}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{ip}$ ; if located between 0 and  $E_{ic}$ , the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from  $E_{ic}$ .

Table 8-31

**ASSIGNMENTS TO COMPANY MTOE:**  
1st MEDICAL BATTALION  
C COMPANY

Respondents	Type of MOS	Authorized Strength	Instruction:		Instruction:		Instruction:	
			Female 10% (q=7)	Female Increment (10% to 35%) (q=17)	Female 35% (q=24)	Female 50% (q=34)	Male Increment (10% to 35%) (q=17)	Male 10% (q=7)
			$E_p$	$E_{ip}$	$E_{ic}$	$E_{ip}$	$E_{ic}$	$E_p$
Officers (N=4)	MOS Most Demanding Physically (52B, 63B, 76D)	6	.6	0.0	0.0*	2.7* 5.4*	1.5 2.6 7.0	.6 * 2.8
	MOS Least Demanding Physically (71G, 75B, 91Q)	4	.4 *	2.0	3.4*	3.4* .4*	.4	0.0
NCO's (N=15)	MOS Most Demanding Physically (52B, 63B, 76D)	6	.6	0.0	.9*	1.6* 5.1*	1.5 2.0 * 7.8	.6 * 3.1
	MOS Most Demanding Physically (71G, 75B, 91Q)	4	.4 *	1.7	1.0	.7 * 4.3	2.4* 3.1* 1.6	.4 * .2

NOTE: Total authorized strength for MTOE = 68

\* Indicates that the difference between the observed value (O) and the value expected under the proportionality hypothesis,  $E_p$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{ip}$  and 0 or between 0 and  $E_{ic}$ . If located between  $E_{ip}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{ip}$ ; if located between 0 and  $E_{ic}$ , the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from  $E_{ic}$ .

Table B-32

## ASSIGNMENTS TO COMPANY MTOE:

1st MILITARY POLICE COMPANY (18th AG COMPANY)

Respondents	Type of MOS	Authorized Strength	Instruction: Female		Female Increment (10% to 35%)		Instruction: Female		Male Increment (10% to 35%)		Instruction: Male	
			$E_p$	0	$E_{ip}$	0	$E_{ic}$	0	$E_{ip}$	0	$E_{ic}$	0
Officers (N=11) 95B)	MOS Most Demanding Physically (52B, 76Y, 95B)	44	4.4	4.1			10.4	10.5 *	30.0*	11.0 *	20.7	23.3
											4.4 *	9.3
MOC's (N=50) 95B)	MOS Least Demanding Physically (71C, 71D, 71L, 74B, 75C, 75E)	32	3.2	2.5	8.0 *	13.4 *	6.3	15.9*	23.4*	3.2*	3.2 *	.6
MOC's (N=50) 95B)	MOS Most Demanding Physically (52B, 76Y, 95B)	44	4.4	3.0			9.5*	13.6*	33.2*	11.0 *	24.3	23.0
											4.4 *	9.2
MOC's (N=50) 95B)	MOS Least Demanding Physically (71C, 71D, 71L, 74B, 75C, 75E)	32	3.2	3.4	8.0 *	12.6 *	8.7	16.0*	19.2*	1.8*	3.2 *	.7

NOTE: Total authorized strength for MTOE = 108

\* Indicates that the difference between the observed value (0) and the value expected under the proportionality hypothesis,  $E_p$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{ip}$  and 0 or between 0 and  $E_{ic}$ . If located between  $E_{ip}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{ip}$ ; if located between 0 and  $E_{ic}$ , the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from  $E_{ic}$ .

Table B-33

ASSIGNMENTS TO COMPANY MTOE:  
FIVE MILITARY POLICE UNITS  
554th, 300th, 218th, 194th, 3rd MP COMPANIES

Respondents	Type of MOS	Authorized Strength	Instruction: Female		Instruction: Female Increment		Instruction: Female Male		Instruction: Male Increment		Instruction: Male	
			$E_p$	$E_{1c}$	$E_{1p}$	$E_{1c}$	$E_{1p}$	$E_{1c}$	$E_{1p}$	$E_{1c}$	$E_p$	$E_{1c}$
Officers (N=14)	MOS Most Demanding Physically (31B, 52B 63B)	7	.7	.7			2.1	3.3	4.2*	1.8	1.1* 8.7	.7 * 3.2
	MOS Least Demanding Physically (71B, 75B, 94B)	7	.7 * 3.0	1.8	1.9 *	7.5	5.1*	5.2*	1.4*			.7 .7
MCO's (N=47)	MOS Most Demanding Physically (31B, 52B, 63B)	7	.7 * 1.0				2.6	3.2	4.4*	1.8 *	1.0* 8.5	.7 * 3.4
	MOS Least Demanding Physically (71B, 75B, 94B)	7	.7 * 3.5	1.8 *	1.1 *	8.8	4.6*	5.2*	2.5			.7 .9

NOTE: Total authorized strength for MTOE = 125

\* Indicates that the difference between the observed value (0) and the value expected under the proportionality hypothesis,  $E_p$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{1p}$  and 0 or between 0 and  $E_{1c}$ . If located between  $E_{1p}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{1p}$ ; if located between 0 and  $E_{1c}$ , the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from  $E_{1c}$ .

Table B-34  
 ASSIGNMENTS TO COMPANY MTOE:  
 121st SIGNAL BATTALION  
 HEADQUARTERS & HEADQUARTERS COMPANY

Respondents	Type of MOS	Authorized Strength	Instruction: Female 10% (q=4)		Female Increment (10% to 35%) (q=9) E <sub>ip</sub> 0 E <sub>ic</sub>	Instruction: Female 35% 50% (q=13) (q=18) (q=13)		Male Increment (10% to 35%) (q=9) E <sub>ip</sub> 0 E <sub>ic</sub>		Instruction: Male 10% (q=4) E <sub>p</sub> 0	
			E <sub>p</sub>	0		0	0				
Officers (N=16)	MOS Most Demanding Physically (31E, 31L, 36K, 52B)	8	.8	.5	1.4*	1.9*	5.1*	2.0	2.0 * 7.3	.8	* 2.9
MCO's (N=22)	MOS Least Demanding Physically (41E, 84B, 84C, 84G)	8	.8	1.6	2.0	3.5	4.0	5.3*	6.0*	.9*	.8
	MOS Most Demanding Physically (31E, 31L, 36K, 52B)	8	.8	.5	1.5*	2.8*	4.9*	2.0	2.5 * 5.8	.8	* 2.3
	MOS Least Demanding Physically (41E, 84B, 84C, 84G)	8	.8	1.8	2.0	2.7	4.5	4.5*	5.4*	.8	* .1

NOTE: Total authorized strength for MTOE = 36

\* Indicates that the difference between the observed value (0) and the value expected under the proportionality hypothesis, E<sub>p</sub>, for a given instruction is statistically significant (at 5% level), unless asterisk is located between E<sub>ip</sub> and 0 or between 0 and E<sub>ic</sub>. If located between E<sub>ip</sub>, the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from E<sub>ip</sub>; if located between 0 and E<sub>ic</sub>, the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from E<sub>ic</sub>.



Table B-35

**ASSIGNMENTS TO COMPANY MTOE:  
121st SIGNAL BATTALION  
A COMPANY**

Respondents	Type of MOS	Authorized Strength	Instruction: Female 10% (q=17)		Female Increment (10% to 35%) (q=41)		Instruction: Female 35% 50% (q=58) (q=83)		Male Increment (10% to 35%) (q=41)		Instruction: Male 10% (q=17)			
			$E_p$	0	$E_{1p}$	0	0	0	$E_{1p}$	0	$E_p$	0		
Officers (N=2)	MOS Most Demanding Physically (36C, 52B)	32	3.2	* 0.0			3.0	5.0	7.0	8.0	3.5	8.8	3.2	* 3.5
	MOS Least Demanding (05E, 72C)	23	2.3	1.5	5.8	7.5	3.8	9.0	9.0	7.0	2.3	1.0	2.3	1.0
NCO's (N=17)	MOS Most Demanding Physically (36C, 52B)	32	3.2	* .4			4.3*	6.4*	16.3*	8.0	*11.5	12.9	3.2	* 5.3
	MOS Least Demanding Physically (05E, 72C)	23	2.3	* 5.3	5.8	5.0*	12.2	9.9*	17.2*	4.5*	2.3	* 1.2	2.3	* 1.2

B-40

NOTE: Total Authorized strength for MTOE = 166

\* Indicates that the difference between the observed value (0) and the value expected under the proportionality hypothesis,  $E_p$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{1p}$  and 0 or between 0 and  $E_{1c}$ . If located between  $E_{1p}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{1p}$ ; if located between 0 and  $E_{1c}$ , the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from  $E_{1c}$ .

Table B-36

**ASSIGNMENTS TO COMPANY MTOE:**  
121st SIGNAL BATTALION  
B COMPANY

Respondents	Type of MOS	Instruction:		Instruction:		Instruction:		Instruction:		Instruction:	
		Authorized Strength	Female 10% (q=0) E <sub>p</sub> 0	Female Increment (10% to 35%) (q=24) E <sub>ip</sub> 0 E <sub>ic</sub>	Female 35% (q=34) 0	Female 50% (q=49) 0	Female Male 35% (q=34) 0	Male Increment (10% to 35%) (q=24) E <sub>ip</sub> 0 E <sub>ic</sub>	Male 10% (q=10) E <sub>p</sub> 0		
Officers (N=5)	MOS Most Demanding Physically (36C, 51A, 52B)	18	1.8 * .0		.0*	3.2* 14.2*	4.5	9.0	13.0	1.8	5.2
	MOS Least Demanding Physically (31N, 72E)	17	1.7 3.0	4.3 7.2	7.5	10.2* 11.2* 2.6*				1.7 *	6.0
NCO's (N=18)	MOS Most Demanding Physically (36C, 51A 52B)	18	1.8 * .7		2.7*	4.6* 6.2	4.5	3.8 *	7.1	1.8 *	2.8
	MOS Least Demanding Physically (31N, 72E)	17	1.7 1.8	4.3 * 7.0	4.5	8.8* 9.3 3.9*				1.7	1.2

NOTE: Total authorized strength for MTOE = 97

\* Indicates that the difference between the observed value (0) and the value expected under the proportionality hypothesis, E<sub>ip</sub>, for a given instruction is statistically significant (at 5% level), unless asterisk is located between E<sub>ip</sub> and 0 or between 0 and E<sub>ic</sub>. If located between E<sub>ip</sub>, the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from E<sub>ip</sub>; if located between 0 and E<sub>ic</sub>, the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from E<sub>ic</sub>.

Table B-37

**ASSIGNMENTS TO COMPANY MTOE:**  
121st SIGNAL BATTALION  
C COMPANY

Respondents	Type of MOS	Authorized Strength	Instruction: Female 10% (q=12)		Female Increment (10% to 35%) (q=1)		Instruction: Female 50% (q=43)		Male Increment (10% to 35%) (q=31)		Instruction: Male 10% (q=12)	
			$E_p$	0	$E_{ip}$	$E_{ic}$	0	0	$E_{ip}$	0	$E_{ic}$	$E_p$
Officers (N=5)	MOS Most Demanding Physically (36C, 52B)	56	5.6 *	.6			7.4 *	13.9 *	27.4 *	14.0	22.0	13.5
												5.6
MCO's (N=15)	MOS Least Demanding Physically (05F, 31N)	6	.6	1.2	1.5	2.5	3.0	3.7 *	4.8 *	1.2		.6
												.8
	MOS Most Demanding Physically (36C, 52B)	56	5.6 *	.3				6.7 *	15.2 *	17.0	14.0	11.9
											12.8	5.6
	MOS Least Demanding Physically (05F, 31N)	6	.6 *	1.6	1.5 *	2.6	4.0	4.2 *	4.1 *	2.2		.6
												1.2

NOTE: Total authorized strength for MTOE = 124

\* Indicates that the difference between the observed value (0) and the value expected under the proportionality hypothesis,  $E_p$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{ip}$  and 0 or between 0 and  $E_{ic}$ . If located between  $E_{ip}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{ip}$ ; if located between 0 and  $E_{ic}$ , the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from  $E_{ic}$ .

Table B-38

ASSIGNMENTS TO COMPANY MTOE:  
1st SUPPLY & TRANSPORTATION BATTALION  
HEADQUARTERS & HEADQUARTERS COMPANY

Respondents	Type of MOS	Authorized Strength	Instruction:			Instruction:			Instruction:		
			Female 10% (q=5)	Female Increment (10% to 35%) (q=11)	Female 35% (q=16)	Female 50% (q=23)	Male 35% (q=16)	Male 10% (q=5)	Male Increment (10% to 35%) (q=11)	Male 10% (q=5)	Male 10% (q=5)
			$E_p$	$E_{ip}$	$E_{ic}$	$E_p$	$E_{ip}$	$E_{ic}$	$E_p$	$E_{ip}$	$E_{ic}$
Officers (N=9)	MOS Most Demanding Physically (63B, 63F)	27	2.7 *	.2		2.0 *	7.6*	12.2*	6.8	9.0	8.0
									2.7 *	3.2	
MCO's (N=16)	MOS Least Demanding Physically (71B, 75B)	4	.4 *	1.9		3.6*	3.3*	.4*			
									.4	0.0	
	MOS Most Demanding Physically (63B, 63F)	27	2.7 *	.2		1.8*	9.5*	9.8	6.8	8.1 *	5.0
									2.7 *	2.0	
	MOS Least Demanding Physically (71B, 75B)	4	.4 *	2.1		3.0*	2.4	.5*			
									.4	.3	

B-43

NOTE: Total authorized strength for MTOE = 46

\* Indicates that the difference between the observed value (O) and the value expected under the proportionality hypothesis,  $E_p$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{ip}$  and 0 or between 0 and  $E_{ic}$ . If located between  $E_{ip}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{ip}$ ; if located between 0 and  $E_{ic}$ , the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from  $E_{ic}$ .

Table B-39

ASSIGNMENTS TO COMPANY MTOE:  
1st SUPPLY & TRANSPORTATION BATTALION  
A COMPANY

Respondents	Type of MOS	Authorized Strength	Instruction: Female		Female Increment (10% to 35%) (q=9)		Female Female Male 35% 50% 35% (q=31) (q=44) (q=31)		Male Increment (10% to 35%) (q=22)		Instruction: Male 10% (q=9)			
			E <sub>p</sub>	0	E <sub>ip</sub>	0	E <sub>ic</sub>	E <sub>ip</sub>	0	E <sub>ic</sub>	E <sub>p</sub>	0		
Officers (N=6)	MOS Most Demanding Physically (52B, 62M, 76V, 76W)	30	3.0	*	.6			4.9*	12.8	11.8	7.5	6.1 * 14.3	3.0	* 5.7
	MOS Least Demanding Physically (71B, 75B)	5	.5	*	3.1	1.3	1.4 * 7.8	4.5*	4.5*	.5*			.5	.3
NCO's (N=13)	MOS Most Demanding Physically (52B, 62M, 76V, 76W)	30	3.0	*	.5			6.0*	9.8*	10.4	7.5	6.3 10.3	3.0	* 4.1
	MOS Least Demanding Physically (71B, 75B)	5	.5	* 3.4	1.3	.4 * 8.1	3.5*	4.4*	.8*				.5	.3

B-44

NOTE: Total authorized strength for MTOE = 88

\* Indicates that the difference between the observed value (0) and the value expected under the proportionality hypothesis,  $E_p$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{ip}$  and 0 or between 0 and  $E_{ic}$ . If located between  $E_{ip}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{ip}$ ; if located between 0 and  $E_{ic}$ , the value expected in the incremental interval under the proportionality hypothesis, then 0 is significantly different from  $E_{ic}$ .

Table B-40  
 ASSIGNMENTS TO COMPANY MTOE:  
 1st SUPPLY & TRANSPORTATION BATTALION  
 B COMPANY

Respondents	Type of MOS	Authorized Strength	Instruction: Female		Instruction: Female Increment		Instruction: Female Female Male		Instruction: Male Increment		Instruction: Male	
			10% (q=12)	$E_p$	10% to 35% (q=30)	$E_{ip}$	35% (q=42)	50% (q=61)	10% to 35% (q=30)	$E_{ip}$	10% (q=12)	$E_p$
Officers (N=7)	MOS Most Demanding Physically (64C)	112	11.2 * 5.6				35.3*	54.0*	28.0 * 30.0 * 22.3		11.2 *	8.9
	MOS Least Demanding Physically (75B)	1	.1 .8	.3	.2 2.0	1.0	1.0	1.0			.1	.3
NCO's (N=16)	MOS Most Demanding Physically (64C)	112	11.2 * 7.7				35.3*	52.4	28.0 27.4 21.9		11.2 *	8.8
	MOS Least Demanding Physically (75B)	1	.1 1.0	.3	-	-	.8*	.9*			.1	.3

B-45

NOTE: Total authorized strength for MTOE = 121

\* Indicates that the difference between the observed value (O) and the value expected under the proportionality hypothesis,  $E_p$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{ip}$  and 0 or between 0 and  $E_{ic}$ . If located between  $E_{ip}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{ip}$ ; if located between 0 and  $E_{ic}$ , the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from  $E_{ic}$ .

Table B-41

**ASSIGNMENTS TO COMPANY MTOE:**  
**3rd SUPPLY & TRANSPORTATION BATTALION**  
**HEADQUARTERS AND HEADQUARTERS COMPANY**

Respondents	Type of MOS	Authorized Strength	Instruction:		Instruction:		Instruction:		Instruction:	
			Female 10% (q=2)	Female 10% (q=2)	Female Increment (10% to 35%) (q=6)	Female 35% (q=8)	Female 50% (q=12)	Male 35% (q=8)	Male Increment (10% to 35%) (q=6)	Male 10% (q=2)
			$E_p$	0	$E_{ip}$	0	$E_{ic}$	$E_{ip}$	0	$E_{ic}$
Officers (N=11)	MOS Most Demanding Physically (36K)	2	.2	.2		.3*	.6	1.3*	.5	.7 1.5
	MOS Least Demanding Physically (71B, 71L, 75B, 76D)	8	.8 *	1.2	2.0 *	3.3	3.0	4.5*	1.4*	.8 *
MCO's (N=15)	MOS Most Demanding Physically (36K)	2	.2	.1		.3*	.4*	1.5*	.5	.6 * 2.2
	MOS Least Demanding Physically (71B, 71L, 75B, 76D)	8	.8 *	1.4	2.0 *	3.2	3.6	4.7*	1.4*	.8 *

NOTE: Total authorized strength for MTOE = 23

\* Indicates that the difference between the observed value (0) and the value expected under the proportionality hypothesis,  $E_p$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{ip}$  and 0 or between 0 and  $E_{ic}$ . If located between  $E_{ip}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{ip}$ ; if located between 0 and  $E_{ic}$ , the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from  $E_{ic}$ .

Table B-42  
 ASSIGNMENTS TO COMPANY MTOE:  
 3rd SUPPLY & TRANSPORTATION BATTALION  
 A COMPANY

Respondents	Type of MOS	Authorized Strength	Instruction:		Instruction:		Instruction:	
			Female 10% (q=12)	Female Increment (10% to 35%) (q=30)	Female 35% (q=42)	Female 50% (q=60)	Male 35% (q=42)	Male Increment (10% to 35%) (q=30)
			$E_p$	$E_{ip}$	$E_{ic}$	$E_p$	$E_{ip}$	$E_{ic}$
Officers (N=5)	MOS Most Demanding Physically (62M, 63B, 63C)	11	1.1	1.4		2.2	4.2	6.5
							2.8	4.3
								5.5
MCO's (N=10)	MOS Least Demanding Physically (71B, 75B, 76Y, 92C)	40	4.0	6.0	15.0	22.4	17.4	7.6
								4.0
EPL (N=10)	MOS Most Demanding Physically (62M, 63B, 63C)	11	1.1	* .4		2.9	3.8	7.1*
								3.0*10.3
								1.1 * 4.1
EPL (N=10)	MOS Least Demanding Physically (71B, 75B, 76Y, 92C)	40	4.0	5.6	14.0	10.5	17.1	9.9
								4.0 * 1.2

NOTE: Total authorized strength for MTOE = 120

\* Indicates that the difference between the observed value (0) and the value expected under the proportionality hypothesis,  $E_p$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{ip}$  and 0 or between 0 and  $E_{ic}$ . If located between  $E_{ip}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{ip}$ ; if located between 0 and  $E_{ic}$ , the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from  $E_{ic}$ .



Table B-43  
 ASSIGNMENTS TO COMPANY MTOE:  
 3rd SUPPLY & TRANSPORTATION BATTALION  
 B COMPANY

Respondents	Type of MOS	Authorized Strength	Instruction: Female 10% (q=3)		Female Increment (10% to 35%) (q=7)		Instruction: Female 35% 50% (q=10) (q=15) (q=10)		Male Increment (10% to 35%) (q=7)		Instruction: Male 10% (q=3)			
			$E_p$	0	$E_{ip}$	0	$E_{ic}$	0	$E_{ip}$	0	$E_{ic}$	0	$E_p$	
Officers (N=9)	MOS Most Demanding Physically (63B, 63C)	20	2.0	*	.1		3.2*	7.0*	8.8*	5.0 *	6.6	5.2	2.0	2.3
	MOS Least Demanding Physically (75B, 76Y)	3	.3	*	2.0	.8	.8	* 5.0	2.7*	2.9*	.1*		.3	.3
NCO's (N=19)	MOS Most Demanding Physically (63B, 63C)	20	2.0	*	.3		2.8*	6.8*	8.0*	5.0 *	6.0	5.0	2.0	2.0
	MOS Least Demanding Physically (75B, 76Y)	3	.3	*	1.8	.8	.7	* 4.5	2.5*	2.6*	.6*		.3	.2

NOTE: Total authorized strength for MTOE = 30

\* Indicates that the difference between the observed value (0) and the value expected under the proportionality hypothesis,  $E_{ip}$ , for a given instruction is statistically significant (at 5% level), unless asterisk is located between  $E_{ip}$  and 0 or between 0 and  $E_{ic}$ . If located between  $E_{ip}$ , the value expected in the incremental interval under the proportionality hypothesis and 0, then 0 is significantly different from  $E_{ip}$ ; if located between 0 and  $E_{ic}$ , the value expected in the incremental interval under the incremental concentration hypothesis, then 0 is significantly different from  $E_{ic}$ .

Table B-44

FOR TASK FAILURES BECAUSE OF TOO MANY  
WOMEN IN THE UNIT, CHECK:  
"WHICH OF THE FOLLOWING WERE TRUE  
WITH RESPECT TO THE MOST SERIOUS FAILURE?"  
(NUMBER OF RESPONSES)

	POSTTEST ONLY	
	Off <sup>a</sup> (N= 16)	NCO <sup>a</sup> (N= 106)
Task unsuitable for women because too much strength required	8	47
Task unsuitable for women for reasons other than strength	4	40
Women not appropriately trained	10	32
Supervisor didn't know how to supervise women	5	19
Men and women didn't work well together	2	16
Other	6	13

<sup>a</sup> May check more than one.

Table B-45

"IF ENLISTED WOMEN WERE ALLOWED TO GO INTO COMBAT, WHAT DO YOU THINK  
MOST EM/MOST EW/YOU YOURSELF WOULD DO ABOUT GOING INTO COMBAT?"

Officer Responses  
(in %)

Response Alternatives	PRETEST			POSTTEST		
	Most EM (N=129)	Most EW (N=126) <sup>a</sup>	Your- self (N=133)	Most EM (N=148)	Most EW (N=139) <sup>a</sup>	Your- self (N=149)
Would do anything to get to go	2	2	20	5	1	19
Would want to go, but wouldn't do anything to get to go	22	10	22	17	6	17
Wouldn't care one way or the other	6	5	9	5	6	10
Wouldn't want to go, but wouldn't try to get out of going	64	55	47	66	51	51
Would do almost anything to keep from going	6	29	3	7	36	3

<sup>a</sup> Officers who did not choose the "There are no women in my company" alternative.

Table B-46

"IF ENLISTED WOMEN WERE ALLOWED TO GO INTO COMBAT, WHAT DO YOU THINK  
MOST EM/MOST EW/YOU YOURSELF WOULD DO ABOUT GOING INTO COMBAT"?

<u>NCO Responses</u> (in %)						
Response Alternatives	<u>PRETEST</u>			<u>POSTTEST</u>		
	Most EM (N=425)	Most EW (N=408) <sup>a</sup>	Your- self (N=434)	Most EM (N=490)	Most EW (N=460) <sup>a</sup>	Your- self (N=495)
Would do almost anything to get to go	7	5	27	7	5	21
Would want to go, but wouldn't do anything to get to go	20	9	21	15	7	19
Wouldn't care one way or the other	10	4	11	12	5	14
Wouldn't want to go, but wouldn't try to get out of going	46	34	36	48	28	41
Would do almost anything to keep from going	17	49	4	18	55	6

<sup>a</sup> NCO's who did not choose the "There are no women in my company" alternative

Table B-47

"IF ENLISTED WOMEN WERE ALLOWED TO GO INTO COMBAT, WHAT DO YOU THINK  
MOST EM/MOST EW/YOU YOURSELF WOULD DO ABOUT GOING INTO COMBAT?"

Response Alternatives	<u>EM Responses</u> (in%)					
	PRETEST			POSTTEST		
	Most EM (N=1487)	Most EW (N=1338) <sup>a</sup>	Your- self (N=1544)	Most EM (N=1547)	Most EW (N=1423) <sup>a</sup>	Your- self (N=1582)
Would do almost anything to get to go	4	5	11	5	6	12
Would want to go, but wouldn't do anything to get to go	14	7	16	15	8	15
Wouldn't care one way or the other	15	7	16	18	7	18
Wouldn't want to go, but woul- dn't try to get out of going	43	23	40	45	18	41
Would do almost anything to keep from going	24	58	16	17	61	15

<sup>a</sup> EM who did not choose the "There are no women in my company" alternative.

Table B-48

"IF ENLISTED WOMEN WERE ALLOWED TO GO INTO COMBAT, WHAT DO YOU THINK  
MOST EM/MOST EW/YOU YOURSELF WOULD DO ABOUT GOING INTO COMBAT?"

EW Responses  
(in %)

Response Alternatives	PRETEST			POSTTEST		
	Most EM (N=189)	Most EW (N=188) <sup>a</sup>	Your- self (N=190)	Most EM (N=207)	Most EW (N=198) <sup>a</sup>	Your- self (N=208)
Would do almost anything to get to go	4	6	3	3	4	9
Would want to go, but wouldn't do anything to get to go	8	6	14	11	7	9
Wouldn't care one way or the other	8	4	6	16	12	7
Wouldn't want to go, but woul- dn't try to get out of going	56	34	35	41	30	36
Would do almost anything to keep from going	25	49	42	29	48	39

<sup>a</sup> EW who did not choose the "There are no women in my company" alternative

Table B-49

DO/DID MALE NCO'S TREAT MEN AND WOMEN  
DIFFERENTLY?/DIFFERENTLY DURING  
REFORGER?"  
(IN %)

Response Alternatives	PRETEST				POSTTEST			
	Off (N=133)	NCO (N=439)	EM (N=1511)	EW (N=192)	Off (N=146)	NCO (N=487)	EM (N=1580)	EW (N=206)
Yes	50	53	52	58	39	40	47	43
No	39	37	30	36	49	43	28	49
Don't know	11	10	18	5	12	17	26	8

Table B-50  
 "HOW DO/DID MALE NCO's TREAT MEN  
 AND WOMEN DIFFERENTLY?"  
 (IN %) <sup>a</sup>

Response Alternatives	PRETEST				POSTTEST			
	Off (N=75)	NCO (N=277)	EM (N=896)	EW (N=118)	Off (N=67)	NCO (N=266)	EM (N=933)	EW (N=100)
More privileges for women	31	48	47	16	31	50	51	16
Easier jobs for women	76	70	54	31	57	58	55	30
Help on job for women	31	29	25	16	27	24	27	12
More attention to women's personal problems	39	42	34	18	40	45	39	15
More obscene language around men	51	27	21	23	19	19	22	21
Harsher discipline for men	25	25	19	11	13	20	23	3
More discipline for men	32	24	20	14	13	23	23	7
Other	17	8	9	40	21	12	12	42

<sup>a</sup> Percentages do not add up to 100% because respondents could choose more than one alternative.



Table B-51

"DO/DID MALE OFFICERS TREAT MEN AND  
WOMEN DIFFERENTLY?/DIFFERENTLY DURING  
REFORGER?"  
(IN %)

Response Alternatives	PRETEST				POSTTEST			
	Off (N=133)	NCO (N=437)	EM (N=1510)	EW (N=193)	Off (N=147)	NCO (N=487)	EM (N=1577)	EW (N=209)
Yes	44	37	37	30	30	35	38	25
No	50	44	35	52	63	44	28	63
Don't know	6	20	28	18	8	21	34	12

Table B-52  
 "HOW DO/DID MALE OFFICERS TREAT MEN  
 AND WOMEN DIFFERENTLY?"  
 (IN %) <sup>a</sup>

Response Alternatives	PRETEST				POSTTEST			
	Off (N=60)	NCO (N=174)	EM (N=661)	EW (N=58)	Off (N=44)	NCO (N=208)	EM (N=784)	EW (N=63)
More privileges for women	32	44	46	16	40	54	51	21
Easier jobs for women	55	71	48	22	60	57	48	21
Help on job for women	23	29	23	10	21	25	28	19
More attention to women's personal problems	47	47	36	29	42	46	40	18
More obscene language around men	38	21	17	17	21	19	19	8
Harsher discipline for men	23	24	20	9	10	19	25	5
More discipline for men	28	25	21	12	17	21	23	5
Other	17	9	7	34	10	12	8	35

<sup>a</sup> Percentages do not add up to 100% because respondents could choose more than one alternative.